

The risk of profit or loss is borne by the businessmen. The labourers do not own the machinery on which they work and work for wages. The profit in production goes to the owners of capital and the businessmen. In the past, however, the system of Industrial production was quite different. The society then could not produce such types of goods and in such quantities as the modern society does. The old society did not use machinery. Only certain simple tools were made use of, and these were owned by the artisans themselves. Production was on a small-scale and the markets, in which it was disposed of, was also very small. The technique of production was determined by tradition and the sale of the product was regulated by some social controls. Thus the old form of industrial production was different from the modern one. Similarly, the old form of organisation in agriculture, commerce, transport etc., was different from the modern form.

Yet, there has been a continuity in changes from one form of organisation to another; and the history of the total change appears a consistent whole. It also looks capable of some rational explanation. The changing forms appear to be connected with one another. In fact, any particular form, existing at any time in a society, can be seen to emerge from its predecessor and to merge into its successor. It also appears to be connected with contemporary forms of organisation in other societies. Moreover, the changes from one form to another do not appear to be accidental. Certain economic forces can be found to be at work, to which the changes can be attributed. And, if we are able to understand the working of these forces of change, the nature of the transformation of the economic organisation and the rational explanation of the change at once become clear to us. It is the task of economic history to unfold and explain rationally the working of these forces of change, and the nature of different forms of organisation. In this book, we are going to

A
GENERAL ECONOMIC HISTORY

(of Modern Times upto 1914)

or

(FORMS OF ECONOMIC ORGANISATION)

by

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CHAPTER II

OLD AGRICULTURE

Section I.—Feudal Agricultural Organisation

In the old times, land was by far the most important source of wealth. It provided food, the essential of life. It also provided raw materials—cotton or wool—for clothing—another essential of life. Industry and Commerce were too small of stature, to be compared with Agriculture. They produced much less wealth and gave far less employment to people than agriculture did. Compared to agricultural products, their products too were much less essential for life. The economic importance of land, therefore, was supreme.

In Europe of the feudal times, i.e. before the modern age, the economic importance of land was reflected in the political organisation of the country. In fact in those times, to be the king was to be the owner of the land. The extent of political power of the king was measured by the area of land under his control. The king, thus was the overall owner of the entire land of the country. In the defence of the country in times of war, and in its administration in times of peace, he was served by his subordinate military officers. For their services, the king made payments in terms of land; because payment in anything else was neither worthwhile nor possible. Money had not come into general use, and could buy but very few commodities. The King's officers also became thus the owners of land. If they in turn were served

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ed to use these as his fuel. In old times, there was much waste and forest land near the villages and the agriculturist could bring fuel from there. With the extension of cultivation, however, fuel wood is now difficult to get and the agriculturist uses cow dung and remains of fodder as fuel. This means that none of the old methods of manuring are now in use. The European agriculture was, in modern times, revolutionised by artificial chemical manures. But these too have been generally beyond the means of average agriculturist in India and thus the present Indian agriculture has not benefitted appreciably by the modern advance in the science of manuring. In respect of manuring, therefore, there is not only no progress, but also positive deterioration.

(3) **Soil Erosion:** The productivity of the land is also materially affected, if rivers and streams in floods are allowed to drain away the fertile soil on the surface. All experts investigating the question of agricultural productivity have stressed the importance of protecting the soil from being drained away by erosion of the soil. The position in this respect also has deteriorated in modern times. Formerly the rushing waters of the flooded rivers were checked by very extensive forests through which they flowed. The banks of fertile lands also were protected by plantation of flood-resisting weeds and grasses. In modern times, the position in both these respect has worsened. Reckless deforestation has removed the check on the fury of floods. Bank-protection of weeds also has been destroyed by extension of cultivation to the farthest extent towards rivers and streams and also by the grazing of the increased numbers of cattle. Thus on the one hand the check on floods has been removed and on other, the soil is exposed to them by stripping it of bank protection. Extension of cultivation to the slopes of hills also is held responsible for taking off the checks on monsoon water flowing down from the hills,

PREFACE

The University of Bombay has newly introduced a very interesting subject of 'The Forms of Economic Organisations', for the Inter Commerce students. So far, the students in Economics and Commerce courses of the University, were studying only the unrelated histories of certain economic problems of major countries. In the new subject, however, the emphasis is on the comparative study of the economic history of major countries from an analytical point of view. This book is written from this particular angle. India and England have received special consideration.

In printing such a book in these difficult times, we are guilty of some mistakes. We crave our readers' indulgence for these. In the second edition, of course, these mistakes will be rectified.

I am indebted to many of my friends for their help and encouragement in the preparation of this book. For want of space, I would only mention the name of Principal V. Y. Kolhatkar of Baroda. I am grateful to him for the inspiration and encouragement he has given to me in writing this my first book.

Baroda,
18-6-48.

S. B. MAHABAL.

The gilds, besides, thus being organisations for business, were also brotherly societies for the members. Members of a gild attended the same Church, and worshipped at the altar of the patron saint of the craft. In times of distress, sickness etc. individual members got help from the gild. It did its bit towards the widows and orphans of its members. The poor and the aged too could look to the gild for some help.

The artisans in any craft could be divided in three grades—master craftsmen, journeymen and apprentices. Master craftsmen were fully qualified members of the gild, carrying on the craft independently with or without assistants. Apprentices were the newcomers intending to set up in the industry. They had to take training according to the rules of the gild with one of the master craftsmen. After the completion of the training, the new entrant could set up as an independent craftsman or serve a master for a wage, i.e. be a journeyman, for sometime before setting up as a master. The three grades did not indicate differences of social position; they represented different stages in a career. In fact the apprentices and journeymen lived as family members with the master craftsmen. The apprentice usually became a journeyman after fair chance of becoming a master craftsman, after getting some experience in business and after amassing some capital, which according to the state of the industry, was not big enough to be beyond the capacity of a journeyman. The journeymen and master craftsmen were members of the same gild. And even though the journeymen worked for wages there was no antagonism between them and the masters and no conflict about the wage-rate. To the journeymen, the wage-rate was of little significance as they had their eyes on becoming master

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was small and the journeymen could always look forward to being independent craftsmen themselves by procuring the small capital required.

But in course of time the conditions changed. With the expansion of trade and industry, capital rose in importance. The master-craftsmen themselves were divided. Some became rich on the strength of increasing trade, and others, who had not enough capital for the expanding industry came to be dependent on the richer craftsmen and became wage-earners. The capital requirements of an independent craftsman having increased, all journeymen could not now hope to become independent craftsmen and resigned themselves to being wage earners for ever. So long as the journeymen looked upon their status as a passing phase, they did not worry about wages, hours of work, conditions of work etc. But so soon as they lost the hope of becoming independent craftsmen as a matter of course, antagonism appeared between them and their employers. The journeymen complained about wages, hours of work and the indentures of apprentices, due to which the apprentices when trained, were not to set up as rival to the master craftsmen. The journeymen also complained about their being too many trained persons and the difficulty of getting jobs. In the hope of getting there grievances redressed, they also set up independent gild organisation of their own.

The craftsmen's gilds, for their part, went from bad to worse. The old spirit of co-operation was lost with the loss of equality between all the gild members. Some of the gildsmen had become rich and they came to dominate the gild. Under their pressure, the gilds tried to exploit their monopoly power. They imposed restrictions on new comers and charged heavy fees for admission. The richer elements further, appropriated to themselves the function of selling the gild products to the public. Thus the other gentlemen

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the factory production, is the essence of the Industrial Revolution. Admittedly, factory production is one of its important features; but it is not exclusive for Industrial Revolution. For, even before the era of factory system was shared in by Industrial Revolution, there were some large factories to be found right from the times of Renaissance. In the latter half of 17th century, the Crown in France fostered some factories, which employed a good deal of capital and a number of wage earners and produced goods on mass scale. In England, historians like Sir William Ashley and Professor Unwin have pointed out that in the 16th century, and even in the 14th and 15th centuries, there were great manufacturers in woollen industry who had established factories and employed scores of men. John Winchcombe of Newbery, according to an old book, had in the early years of the 16th century, a prosperous big workshop in which he employed two hundred weavers to look after two hundred looms, assisted by an equal number of apprentices. A hundred women were employed in carding, and hosts of boys and girls were employed on other processes. Thus even before the Industrial Revolution, the Winchcombe factory was a veritable factory, by modern standards.

Others have maintained, and with good reason, that the use of machinery was a distinctive characteristic of the industry after the Industrial Revolution. Max defined the factory itself as 'a workshop in which machinery is used'. J. A. Hobson in his 'Evolution of modern Capitalism' observes that, it is machinery which has increased the capital required for production, thus making it impossible for the workers to own capital. It has consequently degraded them to the position of mere wage earners. It creates an inevitable rift between the capital employers and wage earners, and consequently is at the basis of modern system of production, evolved by the Industrial Revolution. The appearance of power machinery is thus regarded as

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ing relations with the Eastern countries. She amassed money capital through her trade and had a capable banking system. By the beginning of the 18th century, her commercial capital was already financing her textile industry and changing the old handicraft system of the independent weaver. England's commercial development, thus had ripened her economy for the Industrial Revolution. It is true that similar commercial development happened in Portugal, Spain, France and the Netherlands. But other factors, subsequently, checked their industrial development.

The new industrial organisation that the Industrial Revolution was to bring about, required an atmosphere of economic freedom, in which, anybody, having capital, ideas and initiative could implement his schemes without restraints of the gild organisations. In England, the gilds had lost their hold on industries from the 15th century and the field was open. Besides the trade with India, introduced in England a new cotton industry, which being new, was absolutely free from any legal restrictions and conventions which long tradition generally developed. Cotton industry, moreover, lent itself easily to experimentation by machines. The cotton yarn was more able than any other yarn, to stand the strain of earlier machines.

The serf in England had been liberated and was free to move to the town factories. The enclosure movements of the 16th and 18th centuries had driven away many villagers to the towns, in search of gainful occupations. They were thus free and willing to be engaged in the new industry; and the problem of the recruitment of labour was solved. Thus the two main institutions of feudal economy—gilds and serfdom—were already dead or decaying by the 18th century; and a new type of economy viz. industrial capitalism, could easily entrench itself.

The Agricultural Revolution had increased the pro-

CHAPTER I

THE OLD ECONOMIC SYSTEM

Section I—Introduction

Every society evolves an organisation for producing, distributing and consuming the economic goods, it needs to satisfy its wants. This organisation is called the economic organisation. The form of this organisation is neither fixed nor same for all times or for all societies. It is liable to change as new and more helpful methods for the conduct of the economic activity are conceived and adopted. The natural environment and the social institutions and ideas which mould the economic organisation are different for different societies. The economic organisation, therefore, changes from time to time and from society to society.

It is, therefore, easy to understand that the existing or modern forms of economic organisation of India, or of any country for that matter, has not been there throughout history. It is only the latest stage in the continuous development of the economic organisation. In the past, the form was different from what it is now, and in future too, it may come to be different. The present society, for instance, has devised and adopted a certain system of manufacturing goods. There are businessmen who estimate market demand for certain commodities, and undertake to produce them. They collect money capital; purchase raw materials, machinery, factory buildings; employ labourers; and arrange for the production and sale of the manufactured goods in the market. The production is on a large-scale and is intended for extensive markets. Under this system, the price of the product is not guaranteed or regulated.

CHAPTER IX

FEATURES OF INDUSTRIALISM

(1) Growth of Population

The growth of population, in almost all the countries going through the Industrial Revolutions, is a feature of basic social importance. In 1801, the U.K. population was estimated at 14.6 million. By 1911, it increased to 45.2 million. The German population in 1816 was about 25 million and it rose to 64.6 million in 1910. The U.S.A. population was 31 million in 1860 and 122 million in 1930. The Japanese population rose from 35 million in 1873 to 64 million by 1930. Similarly in India, at the first comprehensive census taken in 1881, the population numbered 253 million and increased to 352 million by 1931. It will be seen that the periods of the growth of population in all these countries synchronize well with periods of Industrial Revolutions in these countries.

Looking to the common feature of rising population in the various countries on the one hand, and the simultaneous Industrial Revolutions on the other, one is certainly led to establish a casual relation between them. The Malthusian theory of population attempted an explanation. It was argued that population, thanks to human fertility, tended always to increase until it was checked by lack of means of subsistence. If, therefore, the country's capacity to sustain population increased at any time, due to increase in productivity, it was argued that the population of the country was inherently bound to increase, until once again it was prevented from further increase by lack of food and other necessities. The theory appears quite plausible,

lisation in commerce. The fact that expansion leads to specialisation is a fact noted in all spheres of economic activity. It came true even in commerce. Formerly, when commerce was on small scale, the weekly market or the fair presented goods of all sorts together. There was no need to assort the goods and form specialised markets. With the growth of commerce, it became inconvenient to market all goods at the same place. The larger scale also entailed particular restrictions and cares according to the nature of the commodity. Markets, therefore, became differentiated and now we have specialized markets for cotton, wheat, wool vegetables, bullion etc. In fact there is now a separate market for every commodity. These new and specialised markets are distinguished from old markets mainly in two respects. Formerly the goods to be traded were physically present on the markets. The buyers inspected them for themselves. In modern markets, however, the goods are rarely physically present. It is not found convenient. Instead, the goods are assorted according to definite predetermined standards. Samples of goods stored elsewhere are presented on the actual market and buyers buy on the basis of these samples. The dealings are facilitated by the arrangements for grading and standardisation of the quality of goods. Market authorities, further, ascertain and often testify to the correctness of samples. Of course, where goods cannot be standardised, sample-selling is not possible. That is why manufactured goods rarely make a produce market. In raw materials, the differentiation of product is not important. In case of manufactured goods, it is the essence. The other thing that characterises the specialised markets is speculation and Future trading. When the producer requires raw materials on large-scale he often finds it convenient to buy from time to time, instead of buying his entire requirements for the year at once. Periodic buying, however, involves the risk of price-fluctuations. Prices in future may

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study in broad outline, only that portion of general economic history which roughly covers the modern form of organisation, the pre-modern one and the working of the forces that brought about the change. Broadly speaking, the forces of change are what are called the Commercial, Agricultural, Industrial and Transport Revolutions. They came about roughly between the 15th and the 19th centuries. From country to country, of course, the period of their working is different. The Industrial Revolution in England, for instance, started in the latter half of the 18th century, while it is scarcely noticeable in India until the middle of the 19th century.

The economic organisation covers all the economic activities of any society at any time. It is, therefore, one single whole. For the sake of convenience, however, it can be looked upon as made up of different sections of Agriculture, Industry, Commerce, Transport, Money and Banking etc. The history of the change also can be conveniently studied in these different sections. In what follows, therefore, the developments in agriculture, industry, commerce etc. have been separately treated. But, it must be always borne in mind, that the division of the economic activity is an artificial one; that the different parts are but the different aspects of the same indivisible whole; and that the full significance of the total change cannot be properly appreciated, unless the different sections are looked upon in a unified perspective.

Section II.—Stages of Economic Evolution

The history of the economic evolution of the human society is about six lakhs of years old. It may be divided roughly into a few 'ages.' The earliest is known as the palaeolithic age. It lasted for about five and a half lakhs of years. It was followed by Mesolithic and the Neolithic ages, which covered about twenty-five thousand years. After these, there was

Inhabitants of the parish were required to provide six days' personal or hired labour in a year for the maintenance of roads. The law, however, was not applied vigorously and the people were not enthusiastic about keeping roads good for others. The travelling merchants and the armies who were the main users of the roads. In effect the roads were neglected. The Government too did not much worry about them. In France, on the other hand, the Government was throughout careful about good roads. The Roman roads were not allowed to decay by the French kings. At the close of 18th century there were 25,000 miles of first class roads. Napoleon was a great builder of roads and bridges and good roads preceded his armies. The later French kings further kept up the same interest throughout, and the Republic also did not neglect them. As in England and in France too, the peasants were required to render compulsory service of thirty days in a year for road work. In 1743, Louis XV had also started a central school for his engineers in road making. Germany resembled England in the state of her roads. Due to economic and political disruption, roads in Germany were neglected by Governments, and peoples alike upto the 19th Century. It appears on the whole, that the roads were fairly good only in those countries in which the central governments themselves undertook the responsibility for their maintenance out of public treasure and labour. Whenever such an interest was forthcoming, it was more out of military objectives than from economic considerations. In France, movements of the army on land were of supreme military importance. Roads therefore, were a special care of the government. In England on the other hand, the movement of the army was more important on water than on land. We find, therefore, that English kings bestowed all their care on their navies rather than on their land roads. In India too, whatever good roads existed, were cared for by the

the age of about eight thousand years of early civilizations of Egypt, Babylonia, Greece and Rome. Then followed the Feudal age, which lasted about a thousand years upto the sixteenth century. The following three hundred years were dominated by commerce, and then dawned the Industrial age, through which we are apparently still passing.

The development of economic activity was very slow in the beginning, since men's mental and material equipment for progress was very limited. That is why the deeper we go into history, the progress is progressively slower and the duration of 'age'—the period required for marked progress, is longer.

The Palaeolithic Age

In the beginning of the Palaeolithic age, there was little difference between the organisation and economic activity of man and those of the animals. The earliest economic activity consisted of gathering wild fruits and vegetation and of hunting. Just as many of the beasts moved and lived in packs, man too lived and hunted in pack—the tribe. The tribe, thus, was the earliest organisation for economic activity. The tribe hunted collectively, with weapons made of flint-stone. They were such simple ones as throw-balls, hammer, and knife. The man of those times had acquired only the simple technique of throwing, rolling, scrapping, drilling, cutting and lifting. In course of time, however, he learnt to make weapons and implements of bone in addition. The implements became more and more adapted for particular uses. New weapons like lances and bone-shafts were invented.

During this period, man also learnt to use fire for his benefit. It helped him to prepare and conserve his food by roasting, broiling and smoking. It provided him with warmth purified the air around him and became an additional weapon in his armoury.

Life, of course, was extremely insecure. Man was totally helpless before Nature. His food supply was precariously irregular. He had not learnt the art of storing food; nor was food enough for carry over.

The Neolithic Age

In the Neolithic Age, five major advances were made. (1) Instead of killing the animals, man learnt to domesticate at least some of them. In domestication, man learnt to keep the animal dependant on him, to continue its breeding in captivity and to vary the number according to requirements and circumstances. The main animals domesticated were the dog, sheep, cattle, pig, donkey, cat and horse. The economic significance of domestication was that man's food supply was at once enriched and regularised. Animals were sources of current supply as well as stores of food. They provided milk, meat and wool. Their skins could be made into apparel. They also facilitated transport and helped the cultivation of land. The mobility and speed which they made possible, were invaluable in defence.

The domestication of animals added a herd of cattle to the tribe of man. In search of fodder, therefore, and also in search of game for hunting, the tribes wandered through plains and jungles. This stage of economic activity is described as a pasture stage, since the grazing of domesticated animals was the characteristic economic activity of the times.

(2) In course of time man learnt the art of domesticating some of the plants too. By observation and experience, it became possible for him to cultivate the land with specific grains and reap a harvest which could be anticipated in advance. The principle grains of the Neolithic times, were barley, wheat and millets.

Like domestication of animals, agriculture too increased and regularised the food supply. The growth

of population was accelerated. Grains and fodder could be stored and carried forward from periods of plenty to periods of scarcity.

Agriculture, also, introduced a revolutionary change in the economic organisation of the tribe. For hunting and for grazing the domesticated animals, the tribe was required to wander from plain to plain. When fodder and game became scarce at any place, the tribe moved to another one of plenty. The tribe thus lived a nomadic life. But with agriculture, it was possible for the tribe to dispense with the wandering life and settle down in a suitable place. Agriculture enabled it to produce enough food from the same land year after year.

The land and the herd of cattle were the most important sources of wealth and were held by the tribe collectively. The technique of production had not as yet advanced to yield any surplus above the bare necessities of the tribe. There was, therefore, no accumulated wealth and no private property of individual members.

(3) During this time, considerable advance was made in the art of pottery. In the beginning, probably, baskets made of bamboo and grasses were turned into pots by plastering them with clay. From these models, pots of clay, stones and horns were developed. Pottery enabled better preparation and preservation of food. Boiling became easy and common.

(4) During the Neolithic times, advance was also made in the weaving of textiles. Weaving of baskets from grasses probably prompted the weaving of fibres in course of time.

(5) The implements and weapons were greatly improved and multiplied. Along with stones and bones, copper, bronze and iron too came to be utilised in their making. In agriculture, the chief implements used were the digging stick, spade, hoe, plough and the

sickle. Querns were known for grinding the corn. The spear and the bow and arrow became chief weapons hunting, as well as for fighting between the tribes.

Life in the Neolithic age, was less insecure than in the earlier age. It became a settled one. The man came to have a daily routine of economic work in attending cattle, cultivating land, and making pottery, textiles and implements. As economic productivity increased, the supply of essential goods increased too and allowed an increase in population. Though the economic activity was still very primitive, it was positively the fire runner of the more complex modern activity.

Early Civilizations

In course of time, advance was made in the technique of production; and a surplus arose above the bare necessities of the tribe. This surplus could have been enjoyed collectively, and the standard of life raised for all. But instead the surplus came to be appropriated by certain important social classes in the tribe. The priest class, with its function of the propitiation of the super-natural powers in which the tribe believed, had assumed importance. The warrior class too, had raised itself above others by demonstrating its importance in defence. These two classes, therefore came forward to claim the surplus of the economic wealth. The rich palaces and imposing places of worship of these times bear testimony to the new system of distribution of wealth.

The economic surplus gave rise to private property of the families. Instead of the tribe, the family now became an economic unit. It was almost self-sufficient in producing and consuming the goods it required. It could also supplement its effort, if need be, having persons from other families.

The warrior and the priest class, subsisted on the surplus produced by others. They ceased to produce goods for themselves and thus others had to specialise in the production of particular types of goods in order to produce enough for the upper classes. In course of time, advantages of the division of labour and specialisation were realised and there arose the handicraftsmen plying particular industries like textiles, pottery, leather work, smithy etc. In general, however, the division of labour was crude and limited.

With the advance in fighting power tribes indulged in warfare and since the conquered human beings could be sources of economic surplus, private property came to be developed in human beings too. The system of slavery became an important economic agency of the production of wealth.

Feudalism

In the next stage of feudalism, the whole of the economic activity was systematised. As agriculture was the most important source of wealth, land came to be the basis of the economic relations between different classes in the society. Land was owned by the ruling warrior class and by the church. The cultivation of land was assured by binding down the cultivator class to the soil, and to the land-owner under the system of serfdom. Methods of cultivation were bound down in tradition. The economic surplus from land was reaped by the land-owners by making the serf-cultivators cultivate some land entirely for the benefit of the owner and by making them pay to the landowners various contributions and presents on occasions.

Under feudalism, each village lived mostly an isolated life of its own, subsisting on what it could produce. But slowly the means of transport were developing and some trade was made possible between

a few large villages and towns; and occasionally in fairs, which the villagers attended.

In the few towns in Europe, the number of artisans plying particular industries had increased and for the regulation of each line of industry, they organised themselves in guilds. The guilds regulated the technique of production, the raw materials to be used, the price to be charged, the terms for entry into the trade and industries and so on.

Modern Economy

In course of time, transport developed firstly on water and then on land. Trade developed; and commercial and industrial towns arose. The amount of precious metals in the hands of merchants went on increasing, through trade and through the mining of the metals in new lands. Markets sprang up, where agricultural and industrial goods could be bought and sold for money. With this the old local economy of the villages and towns was shaken to its core. The object of agriculture was no longer required to be only the subsistence of the agriculturist himself. The product could be intended for the market too. Industrial goods also were not required to be sold directly to the consumers in the local markets. With the good offices of the merchants, goods could be sent to unknown distant consumers. There was a stimulus for ever increasing production and with it came greater specialization in production.

Money Capital accumulated with the merchants and with a view to increase their profits, they demanded greater and greater production from the artisans. When they found that the artisans had not enough money capital for increased purchase of raw materials, they pressed their commercial capital in financing the artisans. They began to provide rawmaterials and even tools; and required the artisans to produce for

them. The artisan at this stage lost his independent status as businessman and became a worker, working for wages from the merchant. Production, however, was still carried on at the worker's place.

In course of time, the urge to greater production led to the invention of machinery. At first, the machines were simple and cheap enough to be owned and operated by the artisan at his home. But subsequently, machines became more expensive, complicated and power-driven. The artisan was no longer able to own these or to work them at his place. The capitalist industrialist came to the forefront. He set up expensive and power-driven machinery of his own, in factories and called workers to work on them, in return for wages. He himself provided the raw materials, undertook to sell the finished product to the merchant and of course, pocketed the profit himself. The worker was doomed to become a mere wage-earner, for his life.

Agriculture too was reorganised on the capitalist system and revolutionised in technique by the use of machinery and advanced methods of production.

The machines increased the scale of production, and markets expanded. With greater and greater scale of production, came increasing specialization amongst the producers and also amongst different territories. The old self-sufficiency of localities and even of bigger territories like the provinces, nations and continents was broken down. All of them became progressively inter-dependent in the production and consumption of goods. The old local isolated economy flowered into national and inter-national economy.

With greater and greater division of labour, exchange of goods and use of machinery total production everywhere increased. But the distribution of this wealth came to be extremely unequal and inequitable. The class of wage-earners went on increasing

in numbers but failed to get an appropriate share in the increased wealth. Most of the wealth came to be concentrated in the hands of a few capitalist businessmen. The society was thus divided mainly into two classes of workers and capitalists. Conflict of interests developed between these two classes and with progressive organisation on both sides, the conflict became increasingly more acute and deadly.

Sect. III.—The Self-sufficient Village (Manor) Economy

In the old (pre-modern) economic order, agriculture was by far the most important source of wealth. Just as modern economy is characterised by its developed commerce and large-scale industry, the old economy was characterised by its agriculture. Commerce and industries were yet in their infant stage. Consequently, the village,—the seat of agriculture—was more representative of the old economy, just as the big town—the seat of modern industry—may be said to be the representative of modern economy. But the old village, unlike the modern town, tended to be more or less-sufficient. It produced most of the commodities, its inhabitants required or were accustomed to consume. This self-sufficiency was natural enough in the primitive stage of transport. It was only later, when exchange of goods was facilitated by the development of transport, that men living in villages learnt to exchange their products and secure the advantages of exchange. Before the development of the facilities of transport, however, the village mostly lived by itself. This fact is sometime referred to as the economic isolation of the village. Let us now look at the old self-sufficient village a bit more closely.

The nature of the old village or correspondingly manor of Europe can perhaps be better appreciated in contrast to the modern village. The village in modern advanced countries is in close contact with the rest of the country. Economically it is a unit of a larger

national whole. It takes part in the national scheme of production and division of labour. It produces goods like grains, cotton, tobacco, dairy products etc. and sells these in the wider city or country markets in exchange for money. On the other hand it imports from outside mainly manufactured goods, of various sorts. There is an exchange of goods between the village and the outside country. Productive activity of the village is dependent upon outside country. Productive activity of the village is dependent upon outside markets and its consumption also is partly dependent upon outside supplies. The village economy thus is an integrated part of a general wider economy and exchange is the medium through which the relation between the part and the bigger whole is established and kept up.

Politically also, the village community is a part of the bigger national community. The political authority of the Government of the country is firmly established and is felt in the village. The government maintains peace and order through its machinery of force—the police and the army—and administers the village from day to day through its civil servants. The government is concerned about the villagers' health, sanitation, education, morals, laws, customs etc. The Government policies in respect of taxation, money, prices, credit, internal and external trade, industry, etc. affect the villagers no less than the town-people. In its policies of irrigation, research, control of crops and crop-diseases, agricultural credit etc. the Government comes in direct touch with the village agriculture. The villagers are required to pay taxes to the government; and in democratic countries have the privilege of helping to form the Government of the country. The modern village is a well knit part of the entire country. It is a cell of the body politic. It responds to impulses from other parts of the country and itself can radiate some.

It will be seen that the crux of these multifarious connections is the facility of easy means of communi-

cation and transport. Without these, the economy based on division of labour and exchange of goods would be impossible. Without these close political relations also are impossible. The Government of the country would not be able to exercise any effective control over the village. Because, after all, the government can ultimately make its authority felt through its agencies of force. But there are no easy means of communication and transport, this force can be used only with the greatest difficulty. The national government's day to day administration too would be impossible in absence of close contact with the village.

It is precisely in this respect of communication and transport, that the old village fundamentally differed from the modern village. There were then no posts, or telegraphs or wireless to connect the village with the rest of the country. There were no railways, or automobiles, not even roads over which the carts could ply without difficulty. The only means of communication then was messenger, and the only means of transport was the pack-animal or the cart.

Political Isolation

No wonder that the village had mostly to live a life by itself. It was isolated from the rest of the country, both politically and economically. What can be the consequences of this double isolation? Politically, the consequences though similar in character everywhere, were formally different in Europe and India of old. Let us consider about the European village, in the first place. The village had to a certain extent to look to its own defence, if not against the foreigners, at least against bandits, marauders and tribes of semi-civilized men in the society; and in those times, these were rampant, as the policing authority of the government was weak. The village, therefore, had to prepare for its own defence. The ruins of old castles and town-walls testify to their old defence preparations. Life

was insecure and this insecurity gave prominence to those in the village who could be leaders in arms. As those were times when the peace of the village was liable to be threatened at any time, the military leaders became leaders of the village normally as well. Tradition and heredity conferred prominence on the houses of military leaders from generation to generation. The King of the country too, recognised them as representatives of the village. The relation between the King and these military leaders was somewhat on the following lines. The village leaders recognised the sovereign authority of the King and undertook to administer their territory on his behalf. They also undertook to serve in the King's army and bring with them a certain number of armed men, in times of war. The King, in return, bestowed upon them, the ownership or proprietorship of the land in their territory. This had obviously an important effect on old agricultural organisation; because the ownership being vested in the lord, the military leader, the actual cultivators became merely tenants or semi-slave agricultural labourers.

In fact the superiority of the lord came to be all sided. He was vested with political authority by the King. The village was subject to his political authority through his own court. He owned most of the land of the village. He was the richest person in the village. The economic and political power gave him social status. Thus economically, politically and socially the lord stood far above all the rest of the villagers. And, in the particular conditions of the old European society, the inferiority of the villagers degenerate into bondage and servility towards the lord and his land. The villagers ceased to be free men. The lord's ownership of the land turned the actual cultivators into tenants and agricultural labourers. Their bondage further denied them the freedom to leave the agricultural occupation and the place to which they were bound.

In India, things developed on different lines. The

village was politically isolated, no doubt. There too, the military leader emerged supreme. But the ownership of the entire land was never vested in him. The cultivators remained the proprietors of the land they cultivated. They remained also free men. Most of them were not bound to the military leader nor to the land. The social superiority of the military leader was counteracted by the caste-system which did not place the military leaders and their followers at the top of the gradations of social status. The judicial authority for the village was for most purposes vested in a representative council called the 'Panchayat'. The political isolation of the Indian village, instead of making it an organisation of a master and semi-slaves as in European countries, made it a more or less independent and democratic political and social unit, subject of course, to whatever authority the Government of the country was able to exercise over it.

One of the effects of such political organisation of the village was that agriculture for most parts was a free enterprise of individual cultivators or a collective enterprise of a group of cultivators. The proprietorship, or if we can call it ownership, being vested in the individual cultivators themselves or in the groups. The system of land holding was mostly that of peasant-proprietorship or collective proprietorship. This, as may be seen, is in marked contrast to the organisation of old European agriculture.

Economic Isolation

The economic consequences of the isolation of the village were still more striking. As goods could not be sent out or brought in easily due to lack of transport facilities, the village had to be self-sufficient as far as possible. All necessities of life had to be produced in the village itself. Agriculture and industry, therefore, were so organised that they produced mainly for local consumption only, and that they produced all the

necessaries of life. There was no specialization in agriculture i.e., no concentration on the production of some particular products only. Moreover, it was no use producing any commodity more than could be consumed in the village itself; because the surplus, if any, could not be sold out in markets. There was no commercialization of agriculture i.e., production with a view to selling in the market. In modern times, we find, that certain tracts in India concentrate on the production of such non-food crops like cotton, jute, tobacco, sugar-cane etc. They do not produce all the food they need but manage to bring it from outside, in exchange of their non-food crops. Such a division of production-specialization and commercialization has its own advantages for all concerned, since it increases total productivity immensely. But this was not possible in the old times, for the simple reason that transport was extremely difficult. Agriculture was mostly for subsistence of the cultivators and the owner.

The economic isolation affected industries too. The village economy had to be mostly self-sufficient industrially also. All essential industries like spinning, weaving, smithy, carpentry, pottery etc. were carried on in the village itself and for local consumption only. In Indian villages, the agricultural part of the village economy and the industrial part came to be fused together by fixed barter transactions between the two. Each year, the individual cultivator came to pay a traditionally fixed share to the various village artisans and they in turn provided the agriculturist throughout the year with certain specified articles of consumption. In European villages it seems that there were no such traditionally fixed barter exchanges; but there too the market in which the artisans could sell their products was only local and moreover the agriculturists themselves made most of the industrial goods they required.

In the old economy, the part played by money was far less significant than it is today. Production being

mostly for subsistence, and trade being very meagre, there was little use for money. It was used in Europe only for paying taxes to the government and to the Church or rent to the lord. It was also sparingly used for making purchases of industrial goods whenever obtainable. In India, the role of money was still less significant. The taxes to the government could be paid in kind instead of in money; and purchases of industrial goods were made on barter terms. Money was used only occasionally for making purchases of luxuries and other articles like salt from outside.

Force of Custom and Tradition

Another important feature that must be stressed was the important and decisive part played by custom and tradition in every aspect of the village life. Movement of goods and men being difficult, the whole system of living was loaded by inertia, a bias for stability and status quo. The political authority was vested by tradition. Succession to every seat of power and governmental function came to be by heredity. Those enjoying power at any time naturally wished that their sons too should inherit the political powers along with their riches; and the highest political authority, namely the King too was not averse to this, as he himself wanted his royalty to be handed down from generation to generation in his own family. Secondly, nothing was to be gained by making political authority of his subordinates non-hereditary. The government's main function was to keep peace and to defend the kingdom. For this, the military leadership of the hereditary character was quite well suited.

The social and religious institutions like the family, the social classes, the caste system, the system of private property, law of inheritance, the Church etc. had been inherited by the old society as the legacy of the older civilizations and the institutions were well suited for the type of economic activity, the old society was con-

ducting. So long as the pattern of economic activity was not changing, there was no reason for the social institutions and customs to change. For, in the ultimate analysis, they are always shaped by the necessities and convenience of the economic organisation. Until the Commercial and Industrial Revolutions, the economic structure of the old society remained unaltered, the social and religious institutions and customs too remained unaltered. In fact, by long standing, they acquired so much stability and force, that the society altogether forgot that they are not permanent and are liable to change.

Lacking the scientific understanding of natural and social phenomena and change, the old society was thoroughly in the grip of religious beliefs. And the influence of religion, in its social aspect, has by its inherent character, been always a stabilizing force. It always gave custom and tradition a peculiar sanctity and denounced change as a heresy.

Custom and tradition also formed most of the 'law' that was administered by the village authority. The Central Government of the country was too far away to make and enforce its own laws in every aspect of life. The people had their own laws, formulated slowly by tradition of the land. It was called the "common law" of the land, and came to be respected by the Central Government even when it acquired enough power to change it.

As we have seen already, custom governed the disposition of land and the status and relation of men concerned with it. It also governed the technique of agriculture in all its details. The crops to be grown, the manure, the sowing and reaping times, the rotation of crops through years were all determined by tradition. Yet it was not for nothing. Obviously by a process of trial and error, wisdom had been embodied in the customs prevailing, and through them it was handed

down from generation to generation. In absence of scientific understanding of the various phenomena, we can readily see how custom, epitomising traditional wisdom, was the surest method of keeping people on the right path. Similarly, industry too, came to be conducted on well worn traditional lines. Even the rules of exchange were crystallised by tradition. In the old Indian village, even the quantities to be exchanged by agriculturists and artisans of their respective goods came to be fixed by tradition.

It is easy to see why custom and tradition came to play such an important part. The isolation of the village, its localised economy, its non-migratory population, the small volume of exchangeable goods, the weak control of central government, the influence of religion etc. all tended to stabilise the village society. The impact of outside goods, ideas or authority was too weak to keep the village life in flux and change. And when there was stability for long, it degenerated into uniformity and monotony. It was no wonder, that repetition of the same ways of life year after year crystallised into custom and tradition which came to govern life itself. Stability pervaded everything. Under the non-changing circumstances, there developed a dull, custom-ridden but perhaps not unhappy village life.

Section IV.—Towns in the Old Economy Origin

The old economy was mainly agricultural economy. Hence, there could be very few large towns, which necessarily thrive only on commercial and industrial activity. The towns that were there, were also very small, compared with the modern towns. In the 13th century there were about 200 towns in England, which could be at all distinguished from villages. The smaller towns had about 500 to 600 persons, while a town with 10000 people was considered to be a large town. London was the biggest town in England, yet only with 25000 inhabitants.

The origin of the towns could be traced to the following causes. The facility of defence was an important factor. In those days of insecurity, a suitable place with a castle and wall could naturally attract more people wishing to play the different trades. Monasteries and cathedrals also were resorts of safety as even in those times the invaders and fighting feudal lords respected the sanctity of the religious places. The convenience of commerce was another factor responsible for the growth of towns. Ports and road and river junctions were convenient centres of trade. The merchants and industrialists' chose such places for the convenience of their trade and towns grew up. Places of pilgrimages also developed into towns, since the numerous visiting pilgrims made industry and commerce profitable in those places. The kings' courts and industry could develop under the patronage of the kings and barons. Moreover, some of the villages, without any particular reason, simply became bigger with the growth of population and could be characterised as towns.

Status

The status of the town was different from that of a village, in that the town was created by a charter from the king, or a baron or the church. The charter bestowed certain privileges on the town, which distinguished the town from the ordinary village. In a way, the charter was a bargain between the town and the granting authority. The town supplied money to the needy king or baron; and they in turn conferred the privileges. The privileges differed from town to town but generally they were four-fold. (a) The charter bestowed some mercantile privileges on the towns. It recognized a merchant gild of the town—an association of the town merchants with powers to regulate the trade within the walls of the town and to levy taxes and duties. (b) Secondly, the charter exempted

the inhabitants from the feudal obligations of personal services, and occasional monetary payments due to the granting authority, in exchange of a lumpsum from the town as a whole. It was called the 'Firma Burgi'. (c) Thirdly, the charter bestowed personal freedom on all the inhabitants of the town and even the bonded serfs from outside the town could acquire personal freedom if they could stay in the town undetected for one year and a day. The inhabitants also had the freedom to buy and sell goods and property; and had the right to bequeath it as they pleased. They had even the freedom of marrying according to their choice, and as under the feudal obligations, did not require the permission of any overlord. (d) Fourthly, the charter conferred local autonomy in the town. The town acquired the right of being governed by a mayor and other elected officers. The town also acquired powers of formulating and administering some laws through its own courts.

、 Economic Significance

The growth of the towns was an indication of a clear breach in the feudal system. The town absolved itself from the feudal obligations and the pattern of feudal laws, and customs. It also contributed to the break-down of feudalism in the villages. It provided an asylum to the fleeing serfs to gain their personal freedom. It created a market for the surrounding villagers and this hastened the commutation of the serfs physical services into money rents, as we shall later see. It specialised in industrial production and created a demand for agricultural product from the surrounding villages. It thus helped both the specialization and the growth of agricultural and industrial production. Moreover, it gave rise to a middle class of merchants and artisans. In the feudal agricultural economy, there were only two classes, the overlords and the lower cultivators. The town nursed a middle

class. It also contributed to the political development of the country, in that it threw up a new class of merchants which could substantially help the king with money and thus could become a rival to the class of feudal lords in the disposition of political power.

Indian Towns

The growth of old Indian town, according to Dr. Gadgil could be traced to either of the three following causes. (1) They were places of pilgrimage or sacred places like Benares (Kashi), Allahabad (Prayaga) Gaya, Puri, Nasik etc. (2) They were seats of courts or capitals of provinces like Delhi, Poona, Lahore, Tanjore etc. (3) And they were commercial towns, their geographical position at road junctions, river confluences and suitable ports being favourable and convenient for commerce. All these towns had specialised in particular industries like fine cotton and silk textiles, embroideries, gold and silver works, stone and wood carving, brass and copper wares etc. But it is to be noted that the towns did not owe their origin and growth to the industries. The industries had collected round them, once they were in existence due to the causes, mentioned above.

Another thing to be noted about the old Indian towns, is that their status as towns did not depend on any charters, as in the case of European towns. They had no privileges of the merchants guilds, or local autonomy. The caste system, common to towns and villages both, governed trade. Since feudalism of the European type did not exist in India, there was no question of the grant of personal freedom to the inhabitants of the towns. The Indian towns did not, therefore, differ from the villages in respect of their status. They differed only in their size, and the advanced character of their trade and industries.

Section V.—Trade and the Merchant Gild

In the old economic system, trade was very meagre. The difficulties of transport were the main reason of this state of affairs. Bulky goods could not be moved on lands and all transport was costly. It was not also safe, as the government of the country could not maintain peace and order and protect it from robbers and pirates. The feudal system itself was another hindrance. The feudal lords used to levy tolls on goods passing through their territory; and often objected to trade itself. There was class of currencies and weights because many of the feudal lords instituted their own currency and weight systems. In absence of strict government control and vigilance, debasement of currency was quite common. The trade, in the towns was the monopoly of the merchant gilds and strangers to the towns could transact business only under the regulations of the gild and on terms prescribed by the gild. The monopolistic power of the gild, therefore, hindered the free development of trade.

Trade in towns was mostly carried on in markets which were held usually once a week. It was a local market and mostly, people of the town and villagers near-by used to buy and sell in it. Trade was also carried in fairs which were held occasionally at the time of religious and social festivals. While the weekly town markets were attended only by local people the fairs were attended by people from distant places. Goods were exchanged on a greater scale and the fairs offered opportunities of inter-regional trade, as merchants from distant places and regions attended the fairs. Both the markets and the fairs were held by towns or individuals under a charter right given by the crown, a feudal lord or the church. They were profitable to those who held them, because they brought money by way of toll and stallage (a fee for the stalls).

Every town had a merchant gild or an association of the merchants recognised in the charter from the king or the lord creating the town. The gild had usually the monopoly of the trade of the town. For-
 eigners visiting the towns were required to sell only to the gild members. The gild regulated the business of all its members regarding weights, measures and quality of the goods. It also regulated the price, on the principle that for every commodity, there was a just price covering the cost and a reasonable profit. Goods were to be sold at the 'just prices' irrespective of occasional scarcity or glut in the market. The gild saw to it that the available raw materials and goods to be sold were distributed properly among the gild members. The gild also offered its good offices in the settlement of disputes and debts between its members. It also, helped its members to collect dues from members of outside gilds.

The gild, moreover, looked to the religious persuasions of its members; and was ready to help its members and their dependents in times of distress. The reactions of the gilds and the town administration differed from town to town but in general, the gilds were more than private chambers of commerce and were closely connected with the town administration.

by their subsidiary military officers, some parts of land were given over to the subordinates. Thus political power was built on distribution and possession of land.

But ownership alone was not sufficient. The land could be useful only if cultivated and for cultivation human labour was necessary. Therefore, along, with land, cultivators also were owned by the lords or military chiefs. For the sake of ensuring the cultivation, the cultivators were tied down to the land, and consequently to the owner of the land. Thus the relations between the lords and the cultivators were also based on land. In short, land was the basis of both political and economic relationships, for most of the population.

Disposition of Land

The actual disposition of land was on the following lines. The king stood high above all and in principle, he owned the entire land of the country. Some of his land he retained for himself and the rest was allotted to his officials. The land retained by the king was called the 'Royal Demesne'. It was cultivated for the king, mostly by servile agriculturists called serfs or villeins and partly by tenants, who paid rent. In either case, the king got a goodly revenue from his own land, and thus it was one of the most important sources of the king's finances.

Excepting the royal demesne, the rest of the land of the country was distributed by the king among his military chiefs. They held the land on the condition of serving the king in times of war, in person as well as by bringing a stipulated number of armed men to the king's administrative officers. As the military chiefs held the king's land on certain conditions, they became primary tenants of the king; and hence were called the tenants-in-chief. The allocation of land was called 'Enfeoffing'.

The tenants-in-chief then re-distributed or re-enfeoffed some of their land to their subordinates on similar conditions of military and administrative services. The rest of the land they retained for themselves, and they got it cultivated by servile agricultural labourers or by tenants.

The lords received the land from the tenants-in-chiefs, and continued the same process of enfeoffing until there was usually one lord for the village or for a small group of villages. The lord's territory was called a manor. The land was thus passed on from the king down to the lowest lord and at each stage some of the land was retained by the receivers and the rest was passed on to the lower stratas. Consequently, a hierarchy of lords was created, the king topping the whole structure. The hierarchy, however, was only in respect of ownership and possession of the land. As for the cultivation, the entire land—whether held by the king, the tenants-in-chief or by lower lords—was cultivated by serfs or tenants. The tenants came to be called the copy-holders and lease holders in England. Some times the lords sold a part of their land outright for a certain price, and ceded its ownership. The purchasers of such lands were called free holders in England. They were, of course, very few.

Let us now consider in more detail the area of jurisdiction of a single lord in England—the Manor. It usually coincided with a village or at the most with a small group of villages. The lord was the chief of the manor. The village land could be classified as arable land, meadow (for grazing) and waste-land which could be used as a source of fuel or at times even for grazing. In principle, the meadow and the waste-land belonged to the lord. Yet in practice, all the villagers had a customary right of grazing their cattle on the meadow and of collecting fuel from the waste-land. Of the arable land some part was held by free-holders. They had bought the land outright

and made the payment for it once for all. But freehold land formed a very small portion of the entire arable land of the village. Besides the free-holders, there were copy-holders also. They had taken the lord's land on lease and paid rent to him. In addition, they had to pay other feudal dues to the lord. These feudal dues consisted of payments made at various occasions. We will see them later. The copy-holders were not required to render any personal services either in the lord's house or on the lord's land.

Serfdom

The remaining arable land was divided into two parts—one was the lord's demesne and the other was held by the serfs. Both these parts were cultivated by the serfs. In a week, the serfs had to work for two or three days on the lord's land, and its cultivation was given preference to and priority over the cultivation of their lands. Sowing, reaping, harvesting etc. had to be done first on the lord's land. The serfs had to render personal services to the lord's household also. In addition, they paid certain feudal dues. These consisted of payments to be made at times of succession to the land, at times of birth or marriage in the serf's households, or at the time of the knighting of the lord's son or marriage of the lord's daughter. If the lord was captured by the enemy the serfs raised a fund to get him relieved. The serf's corn had to be ground only in the lord's mill and a payment was to be made for this. The lord had also the right to hunt in the serf's land. Moreover, all these obligations were not a part of a free and a voluntary contract between the serf and the lord. The serf was not free to give up the entire business and to venture out to any other district. By the force of custom, as well as by the law of the king, he was bound down to his piece of land. If his land was transferred by one lord to another, the serf was also transferred along with

other property in the land. The serf's lot was decided once for all, as soon as he was born in the serf's family. By 'obligation of birth', he belonged to the lord of the family. But there were three ways of escape from the bondage. The lord might willingly free him. Or the serf could purchase his freedom by paying a heavy price to the lord. Or, he could escape bondage if he could stay for more than a year, undetected in a town.

The institution of serfdom was prevalent all over Europe at one time or another. What can be the explanation of this? It is four-fold. Firstly, the lord was always in need of agricultural labourers for the cultivation of his land. But agricultural labourers or tenants were not plentiful. The total population of the country was scarce as it was limited at a very low level by the low productivity of land. Had the agricultural labourers freedom to move, the lord's land might be in danger of being left uncultivated. It was necessary, therefore, for the lord to make the supply of agricultural labour assured for him; and as he was influential at the king's court, and as the king also faced the same difficulty, laws could be easily made to bind the serfs to the land. There was another reason also. If the serfs began to move about the country, they were likely to be a burden and a potential danger wherever they went. The produce of land being scarce at any place, it was necessary to keep out strangers and preserve the produce only for the local population. Thirdly, those were troubled times, and it was not desirable for the peace and tranquility of the country to have landless and propertyless herds of men roving about the country. Lastly, the whole trend of medieval times was to make everything stable and secured by means of customs and traditions. Agriculture was the chief occupation of the country, and one can easily understand the anxiety of the rulers to make the cultivation of the land certain and secured.

It did not matter then, if in doing this, masses of cultivators were denied what we now call economic freedom.

In return for his obligations, the serf enjoyed certain privileges. So long as he was fulfilling his obligations, he could not be evicted by the lord from his piece of land. His livelihood, thus was assured to him. He was protected by the lord from external aggression. In the thirty-years war in Germany (1618 to 1648), the villagers willingly sought protection even accepting the conditions of serfdom. The serf had also the customary right and grazing his sheep and cattle on the lord's meadow and the waste. He could also bring fuel from the waste land.

This was the basic pattern to be found all over Europe; but it must not be supposed that conditions were absolutely uniform everywhere. There were variations; and throughout the middle ages, feudalism was under-going a slow transition. The pace of transition was also not the same everywhere. We therefore find that at any, time, feudal agricultural organization differed from country to country. The above, however, remains a representative pattern.

Slavery in the U. S. A.

The above conditions obtained in European countries of England, France, Germany, Russia etc. before the Agricultural revolution. In the U. S. A., things were different, the difference being due to the fact that U. S. A. was a country newly colonised. And the colonization took place not in middle ages but later in the 18th century, when introduction of capital was already breaking down feudalism in Europe. However, U. S. A. borrowed from the old world, the system of slavery in its Southern colonies. The climate was suitable for growing tropical crops like cotton, tobacco, sugar-cane etc. These crops could be best grown on large scale plantations and slave labour was found to be suited. It was cheap, adaptable to the climate and

its inefficiency could be put up with by the crops. In the Northern colonies, on the other hand, the slave system could not take root. The cold climate was hostile to the Negro Slave. The main crop grown was wheat; and it needed more skillful attention than the slave was capable of. Agriculture in the Northern colonies, therefore, was carried on by free whitemen. Land was plentiful and any intending cultivator could get ample land for a nominal sum or even free. The question of tenancy, therefore, was insignificant. The feudal structure was thus entirely absent in the Northern Agriculture. The slave in the South, however, provided a parallel to the serf in Europe. And his position was even worse than the serf's. As we have seen, the serf had at least protection to person and customary right to cultivate the land. The slave had no rights at all. He was his master's property once and for all.

Feudalism in Japan

In Japan also there was feudal organization of agriculture before the agricultural revolution i.e. before 1868. There too, the cultivators were tied to the land and paid rent and other feudal dues to the lord of the land. An interesting feature of the payment was that it was made not individually but only collectively by the serfs.

Section II.—Agricultural Organisation in India

In marked contrast to the European conditions, the Indian situation did not present the chief characteristics of feudal agriculture. The historical evidence on this aspect of agriculture is scanty. The Indian picture cannot, therefore, be drawn as neatly and clearly as the European picture can be.

The King's Position

As we have seen, the main features of feudal agri-

culture in Europe were the binding down of the serf to the land, his personal services on lord's lands, the lord's ownership of all lands of the village including the waste land and meadows, the over all sovereignty of the king etc. None of these features are found in old Indian agriculture. Firstly, about the over all ownership of the kings. According to the old Hindu Scriptures the king was not regarded as the owner of all land. In the Ushanas Samhita (V-16) and in the Mahabharat (Anushasan—perva), it is stated that forests, sacred hills, places of pilgrimages and temples, dedicated to Devas, are without an owner. There can be no acceptance of gift from the king in regard to them. Regarding the arable land, Jaimini in his 'Mimansa Darshanam' (6-7-3) denies the king's sole right. Jaimini's Commentator explains, "By such enjoyment as the monarch exercises his right of property in the soil, by the same kind of enjoyment, others also exercise their right of property in the soil; there is no difference so far as that goes. Again Sayannacharya commenting about the Vishwajita Yagya says—"The Smriti or law books in calling the king the ruler of the country mean that his ruling power is in respect of giving lessons to the wicked and protection to the good. The land of the country is not king's property. But it is the common property of all who work on that land and enjoy there from the fruits of their own labour." The Hindu king, therefore, was not the owner of land according to the ancient law of the country. Why then should the king receive any revenue from cultivators? Manu says that the king should receive from $\frac{1}{6}$ to $\frac{1}{12}$ of the produce of land, for the services he renders, including the protection of land and cultivators. The king's share thus did not arise out of his ownership of land.

The Moghul kings also seem to have inherited the same traditions and the law of land. For, according to Ain-e-Akbari, 'Akbar exacted the annual tribute of

ten seers of grains from every bigha of cultivated land throughout the empire, in return for the cares of Royalty'.

Landlordism

It will thus be seen that the feudal sovereignty of the European king on land was absent in India. The question of king's overall ownership was not, however, of much practical value. In Europe, the king had delegated his ownership to his tenants-in-chief; and they, in their turn to small lords. Thus the effective owner of land was free lord of the manor. The waste land belonged to him and the serfs also were tied to him. Do we find a counter part of the manorial lord in India? Apparently, the zamindars and old feudal jagirdars provide such a semblance. It is true that the kings entrusted different parts of the kingdom to the care of the sardars and jagirdars. They were to maintain some armed men for king's help and pay a certain tribute to the king out of the revenues of the land under their charge. This is feudalism no doubt. But it differs from European feudalism in important respects. The jagirdars collected revenue from the cultivators. But it does not appear that there was any Indian counterpart to the lord's demesne where the cultivators under the jagirdars were required to render physical labour. The relation between cultivators and jagirdars was mainly one of tenancy based on the produce of land. It was not one of physical services by the cultivators on jagirdar's land.

Besides, the system of landlordism "jahgirdari" or zamindari—was not universal in India. Moreland notes that under Akbar, there was no uniformity as regards zamindari. In Sind, for example, revenue was collected by king's officers directly from the peasants. In other parts, zamindars were recognized wherever local conditions necessitated this. Thus, before the advent of the British rule, there was no feudal land-

lordism of the European type prevailing in India. A loose system of jahagirdari prevailed in some parts; but it was concerned mainly with the collection of the king's revenue. There was no question of jahagirdar's right or ownership of the land. The cultivator was the virtual owner of the land. The permanent zamindars of Bengal, Bihar etc. were no doubt recognized by the East India Company as the owner proprietors, of land under their charge. But, it is recognized that this was a British creation wholly alien to the customs and common law of the land. In fact, the British themselves had to change their technique and recognize cultivator owners in what are now the Ryotwari tracts. It will thus be seen that there was no real counterpart of the lord of European manor in India.

Peasant Proprietorship

The same conclusion is corroborated by evidence pointing to peasant proprietorship in general. Manu (9-44) gives the ownership to the cultivator. Kalluka his commentator says "the field is the property of the man who uproots the stumps of trees and cuts down raised banks, so as to make it arable". Moreland, writing about India under Akbar, observes that there were traditionally only two parties—the king and the cultivator. The question of ownership of land did not arise at all. Land was plentiful as compared with cultivators, intending to cultivate. In fact European travellers testify that cultivators had to be compelled to cultivate as much land as they could. Prof. Radhakamal Mukharjee observes that in the 17th and 18th century, much land was un-occupied even in the Ganges Plain. If land was thus less scarce than cultivators, it was natural that the question of ownership of land was not so significant. The cultivator could get enough land to cultivate and after paying the government dues, could claim the rest of the produce.

Further, the fact that cultivator-ownership was

established in the Ryotwari tracts without any transfers of land from landlords to cultivators either by sale or by legislative measures, also points to the existence of peasant proprietorship. In Europe, peasant proprietorship could emerge, only after the lord's lands had either been confiscated and sold over to cultivators as under French Revolution or after compulsory sale of land by the lord to the cultivator as under the Prussian and Russian edicts. No such confiscation of the landlord's rights of ownership in land had to be gone through, before establishing cultivator ownership in Ryotwari tracts. This fact may be taken to prove conclusively that the actual cultivators were proprietors of land either individually or collectively in most of the land of the country.

Under feudal organization in Europe the serf was tied down to the land and the lord. He was not required to render personal labour on the lord's demesne. In India, however, the cultivators in general do not seem to be in bondage. It is true that in some few cases, the lot of the cultivators resembled that of European serfs. Some lower estates in Bihar and Bengal, the Pudials in Madras, the Pulayas in Malayam and the aboriginal tribes everywhere were in bondage similar to serfdom. Yet, generally speaking the Indian cultivator appears to have been a free man. The foregoing discussion about the ownership of land also should suggest the economic freedom of the Indian cultivator.

Thus in respect of king's overall ownership of land, the really effective ownership of the lord and the bondage of the cultivator, condition in Europe and India differed widely indeed. It is necessary to guess the reasons of this disparity. In the first place the difference in the age and character of civilisation in Europe and India must be taken account of. In the middle ages, the conditions in Western and Northern European countries were still very fluid and uncertain.

Civilisation there was not yet old enough to give stable living conditions. A military hegemony was therefore, essential for establishing peace and for the normal governance of the countries. And feudal organisation based on land was perhaps the most suitable basis for the military super structure. In India, on the other hand, civilisation in the 16th and 17th centuries had advanced enough to develop in villages democratic panchayats and proprietorship of the cultivators. Secondly, the Church in Europe favoured feudalism and in fact itself came to have vested interest in feudal organisation. The Hindu religion in India, however, had a different effect on social organisation. Especially by its system of four 'varnas' and the caste system, it put down the hegemony of military classes. The Moslem invasions and conquests, also did not seriously disturb the old structure that they found in India. Thirdly, the conditions of cultivation in Europe were less favourable than in India. The total population that could be maintained on land in Europe was relatively smaller and consequently the scarcity of labour must have been greater. It is possible that Europe had to solve the problem of scarcity of labour through its institution of serfdom. In India no such drastic measure seems to have been necessary. Thanks to the relatively easy conditions of cultivation.

Methods of Cultivation in Europe

The method of cultivation also was governed by custom, as everything else in the feudal period. The arable land was divided into strips; and strips were entrusted to the care of particular serfs or tenants. Yet the strips at the share of each serf did not form a compact block. They were scattered all over. This was probably done with a view to give to all serfs, pieces of land of various qualities and situation. Compact blocks might have benefitted some and done injustice to others.

Though the land was thus divided into strips, the strips were not separated from one another by fencing. All of them together constituted one open field over which cattle could roam at leisure in search of fodder. In fact, the strips could not be fenced precisely for the consideration of cattle. Fodder problem then was very acute in winter; and open fields gave a greater chance for cattle to survive fodder shortage. As individual pieces of land could not be thus fenced and protected from roving of cattle etc. No individual cultivator could till the land in any way different from that of his neighbour. Individual initiative had no scope. Cultivation, therefore, was almost common cultivation, all strips being treated exactly in the same way. The system of cultivation was, therefore, called open field system. And as there was no point in individual cultivation, the openfield could be better cultivated by all cultivators jointly. It was, therefore, 'communal' cultivation. For the purposes of cultivation, the lords' land and the serfs' land was put together and cultivated as a whole by the serfs.

But, all land could not be tilled every year. It was unable to stand the strain of cropping, year after year. It was necessary, therefore, to manure the land or enable it to recuperate itself by leaving it uncultivated periodically. The only available form of manure was cattle-dung. But this was too inadequate as the number of cattle used to be small. A greater number was not possible due to difficulties of fodder in winter. In fact, much of the cattle had to be killed in winter for want of fodder. Under these circumstances, the only form of manuring available was to leave land periodically uncultivated i.e. fallow, and to rotate the crops. It was found out by experience and crystalised in custom that every piece of land should be kept fallow once in three years and that wheat and barley should be alternated in between. For the purposes of this

arrangement, all arable land was divided on the following lines:

	A Section	B Section	C Section of land
1st year	Wheat	Barley	Fallow
2nd year	Barley	Fallow	Wheat
3rd year	Fallow	Wheat	Barley

It will be seen that though this arrangement was the best possible in the circumstances, it was a wasteful arrangement. One third of the land lay fallow every year.

The system was in force for centuries. It was not changed. The reasons are obvious. In the first place, there was no incentive to the cultivator to increase production. The lord was there to snatch away all increase. Besides, there were no markets to sell the surplus. The serf was submerged in poverty and ignorance. He was bound down by tradition. He had no capital to invest in land. It is no wonder, therefore, that progress was not made for a long time. Incentive to improve was the first essential of progress and this was delayed until commercial and transport revolutions opened out market for surplus produce.

The methods of cultivation in India in old times were more or less the same as they are even now.

CHAPTER III

AGRICULTURAL REVOLUTION

Section. I.—The Forces of Change

In the old economic organisation, described earlier, the development of commerce introduced forces of change, which were destined to transform agriculture completely. The old organisation was suited for the isolated economy of each village. Under it, the production had to be for local consumption only, as surplus produce could not be sold off easily. Communication and transport were extremely difficult. The government of the country had to delegate power to local lords. We have already seen, how, out of this situation, emerged the feudal agricultural organisation of the manorial lord, the serf and the traditional methods of communal cultivation.

Emergence of Markets

In transforming the old economy, the merchant proved to be the 'man of destiny'. Seeking to increase his profit through increased commerce, he helped the commerce of the society to expand gradually. Initially, there were difficulties of transport, but under the pressure of commercial interests, they, were slowly overcome, firstly on water and then on land. Markets were created in towns, where goods came to be exchanged for money. The emergence of markets and of money created an opportunity for agriculturists to produce, more than what was required for their own subsistence. They could now sell the surplus in the markets. The sale fetched money and money was

helpful in procuring other useful goods from the market. An urge to increase the production, therefore, was created, and agriculture broke out of the old grooves. Formerly, the purpose of production was only the subsistence of the farmer. It could now be the sale in the market too. Agriculture was thus commercialised, to a certain extent at least.

Commutation of Serf's Services

The emergence of markets affected also the agricultural organisation. When it was found that money could buy many things—necessaries and luxuries, money became a coveted thing for all. The king wanted money to finance his army and the administration. The lord wanted it for equipping his army and for buying luxuries. The serf, too, wanted it to buy simple necessities like cloth and salt. The manorial lord, therefore, became quite ready to receive money rents from his serfs, instead of their physical services on his land. The serf, on his part, was too glad to commute his services in terms of money and be a tenant of the lord. Once his dues were fixed in money, he was free to increase the produce on his land and profit himself by pocketing the surplus. The institutions of markets and money thus transformed the most distinctive of feudal characteristics—the serf's physical services on the lord's lands.

Escape from Bondage

Further, once the serf's services were commuted and the lords' own lands were not to be cultivated by the serfs, the lord ceased to be particular about the personal bondage of the serfs. In course of time, it was allowed to lapse. Besides, with the introduction of money economy, many of the serfs were able to purchase their freedom, by paying a price to the lords. The new towns, moreover, provided an asylum to the serfs and many escaped from the bondage by fleeing

to the towns. The serfs thus were gradually liberated from the personal bondage; and another distinctive feature of old agricultural organisation was gone. In France, the Revolution of 1789 wiped out serfdom and in Germany and Russia, royal proclamations abolished the personal bondage of the serfs in these countries in the 19th Century.

1st Enclosure Movement

The development of commerce introduced another change in the English agriculture. With the expansion of foreign trade, in the 15th century, the demand for the excellent English wool increased both in the foreign and home markets. The price of wool increased as a result; and the English land lords often found it more profitable to rear sheep on their lands than to grow food crops. They, therefore, began to enclose their lands for sheep-grazing. Other factors, too, helped in this enclosure movement. While wool could be exported, food could not be, according to the existing laws. The price of food, therefore, was low and unremunerative, compared with the price of wool. Moreover, since the Black Death epidemic of 1348-49, the wages of agricultural labourers had risen too high to make cultivation of their lands through hired labourers attractive to the lords on the other hand. Sheep-grazing could be managed with fewer labourers. It, therefore, came to be preferred to agriculture and the enclosure movement of the 15th and 16th centuries transferred much English land from agriculture to sheep-grazing.

2nd Enclosure Movement

By the middle of the 18th century, English agriculture was struck by the second enclosure movement. Under the old system of agriculture, cultivation was carried on in open fields, and according to the traditional methods of fallowing and crop-rotation.

These methods were wasteful and did not allow any scope for experiment and improvement. They also became unsuited to new conditions. The English population had increased considerably by the middle of the 18th century. In 1600 A. D. it was 5 million. It rose to $6\frac{1}{2}$ million in 1750 and to 9 million in 1800. Consequently, there was a greater demand for food and prices of food registered substantial rise. There was thus an incentive to increase the production of food. But it could not be increased, under the old methods of cultivation. Moreover, the agriculturists, by then, had lost their by-employments in the decay of old handicrafts; and agriculture had to be more productive than formerly, in order to sustain the agriculturists only by itself. There arose, therefore, an urgent need for improving the old methods of cultivation.

The improvement was achieved by the the second enclosure movement. The lords moved Parliament to pass the Consolidation Acts, under which, the lords enclosed much of the arable land, the pasture and the woodland, for the purposes of better cultivation. They parcelled the enclosed land into big consolidated farms of two to three hundred acres, and leased them to big tenants. The former serfs and small tenants got small shares of consolidated land, under the consolidation schemes. But soon enough, their position became difficult. The small pieces of lands they received, could not sustain them. They were burdened with the expenses of enclosing their lands, and besides they were required to pay their share of the legal expenses of consolidation. Further, they could not carry on without the use of the pasture and woodland, on which they used to graze their sheep and cattle, and from which they used to bring fuel. The small farmers, therefore, sold off their lands to the lords or to other purchasers. Some of them migrated to the towns to become factory workers. Others became landless ag-

agricultural labourers in the country side. Thus the old organisation of open fields and common cultivation by small tenants changed to that of big consolidated and enclosed farms.

Scientific Progress

On the enclosed farms agricultural technique made rapid advances. With the development of commerce and industry, a new outlook the scientific outlook, was born in economic activity. Under the urge of expanding production, the causal relation between things attracted mens' attention. The character of the different phenomena in all lines of production came to be studied carefully, with a view to understand them and, if possible, control them. This scientific creed as applied to agriculture, changed ultimately many of its aspects fundamentally. The old communal cultivation gave place to individual enterprise in the enclosed farms. It was found out that the old threefield system could be improved. The necessity of leaving the land fallow once in three years, was done away with by the introduction of root-crops. A better rotation of crops was found out. New methods of drilling, sowing, draining, manuring etc. were discovered. The breed of live stock was improved by studying the laws of heredity. In the 19th century, machines were introduced to do the work more cheaply and efficiently. The application of science, thus brought about a technical revolution in agriculture.

Government Policy

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In the 19th century, the development of shipping, the opening of the Suez-canal, and the development of railways in new continents of the Americas and Australia, created a world market for agricultural products. Goods could now be sent cheaply and speedily from one country to another. In the world

market of agricultural goods, old and new countries came to compete with one another. The governments of the various countries had to take note of this competition and to take measures to help their agricultures by granting tariff protection, organising research, facilitating agricultural training, organising marketing facilities and finance etc. In England, Corn Laws were passed in 1815 prohibiting the import of wheat, when the price of wheat in English market was below 80 shillings per quarter, and imposing heavy protective duties at other times. France and Germany too granted tariff protection to their agriculture in the seventies of the century.

Creation of World Market

In the last quarter of the 19th century, English agriculture was very adversely affected by the competition of the more productive agriculture in new countries. It, therefore, turned away from cereal production and concentrated on the specialization of such lines as dairy-farming fruit-gardening, poultry farming, stock-breeding etc.

The forces that brought about the above changes mostly originated in England and then spread to other countries. There is, however, one more force of change which worked only in other countries like France, Germany, Russia, etc. That was the political one. The French Revolution of 1789 is important in agrarian history, because it was that which swept away feudal agricultural organisation from France. In Germany and Russia, the transformation was brought about by the rulers themselves issuing ordinances.

Forces of Change in India

The forces of change may be listed in the case of Indian agriculture more specifically. Of course, they are the same as above, in general; but the following

need emphasis. The change really started with the contact that Western Nations established with India. The doors to international markets were thus opened. The development of railways enabled the movement of agricultural goods from the interior to the ports for transshipment abroad. Wheat, cotton, jute, oilseeds, tea, coffee etc. found international outlet. The development of commerce thus provided the much needed stimulus to production. The development of internal transport further, led to specialisation in agricultural products by different tracts of the country. Bombay and the C. P. could concentrate on the production of cotton, the U. P. on sugar-cane, Bengal on jute, Assam on tea and so on.

Thirdly, the rule of a foreign government in India, during the time of economic transition, was of much consequence. It improved the permanent Zamindari system in many parts of India, but at the same time, legalised the Mahalwari and Ryotwari systems in other parts. The modern tenure systems are thus the result of the reorganisation, by a foreign government according to its convenience and wisdom. The government also did something positively helpful, by way of canal irrigation, co-operative finance, research etc. But it failed to do what national governments in other countries did by way of protective tariff, education, supplementary employments, proper legislation regarding tenancy, debts, agricultural wages, size of farms, etc.

Fourthly, the growth of population from 25 crores in 1872 to 35 crores in 1931, affected agriculture considerably. On the one hand it increased the demand for agricultural products and provided an urge to greater production; on the other, it burdened agricultural enterprise with excessive numbers and handicapped its development.

Fifthly, due to the decay of native handicraft industries, millions of industrial workers became super-

fluous in industry, and fell back on agriculture as their only resort. The agriculturists themselves lost their by-employments like spinning, and became all the more poorer for that.

Section II.—Emancipation of the Serf—in England

It will be recalled that in the mediaeval European agriculture, the lord's land was cultivated by villeins or serfs. These serfs were bound to the land they cultivated, and to the lord they served; they had not the freedom to give up cultivation of the land. Without the lord's permission, they were not free even to leave their village. In short, they had not what we now call economic freedom and freedom of person. They were also required to serve on the lord's land and household for some part of the week. This service was perhaps in lieu of the rent due to the lord for the land they cultivated for their livelihood. Besides, they were obliged to pay fines or feudal dues to the lord, on various occasions.

From their feudal obligations and economic bondage, the serfs were freed in the course of agricultural revolution. The process of emancipation was not uniform or simultaneous in all European countries and, hence, it will have to be noted separately for different countries. The emancipation in England, however, set the pattern for movements in other countries. It would be convenient, therefore, to study first the process of emancipation of the serf fully in England and to note subsequently only the significant differences of the movements in other countries.

Two-fold Character of Serfdom

The villein's degradation was of two types. Firstly, by way of rent, he was required to render his personal

services on the lord's land, and secondly, he was bound in personal status to the land and to the lord. Consequently, his emancipation had to be on two lines. He had firstly to be freed from his personal bondage and from his status as a villein, and secondly from the requirement to pay rent in terms of personal services on lord's land from his villein's tenure.

This two-fold emancipation was achieved by a single change—the commutation of his obligations in terms of money payments to the lord. In course of agricultural revolution, money rent came to be substituted for his services on the lord's land and his personal freedom also was purchased from the lord at a money price.

When agricultural production was only for the cultivators' and the lords' subsistence, there was no reference to money at all. In fact when trade was very meagre, there were no markets and there was even no use for money. But in course of time, trade expanded and money came to be increasingly used for the purposes of exchange. Money, therefore, became valuable and was desired by all. The lords came to derive money for purchasing various articles like wine, armour, cloth and other luxuries. The villeins too had use for money for buying various petty things from the town market. The emergence of market also opened possibilities of acquiring money. If only agricultural production was increased beyond the requirements of subsistence, the excess could be sold in the market and money earned in return. But increase in production by the villein was hindered by the requirement to serve on the lord's land. The villeins sought to get rid of the obligations of service, by agreeing to pay some amount of money, by way of rent. The lord, on his part did not see in this, anything derogatory to his interest. In fact, he welcomed the change over to money rent, because to him also, money was now useful for making purchases in the market. Be-

sides his land too, was not required to be left uncultivated, as a result of this change. Agricultural labourers were available on payment of wages and the lord could get his land cultivated by paid agricultural labourers. Moreover, such cultivation proved more productive than under the unwilling and compulsory labour of the serfs. Thus the emergence of the markets and the introduction of money economy prompted both the lord and the villeins to change the personal basis of their relationship and accept a monetary relation.

The change over to money rent—i.e. commutation of the serfs services in money terms was, however, only gradual and spread over throughout the middle ages. It started at about the 12th century and continued to about the middle of the 15th century in England. It was not even smooth and continuous. During the period, there appeared some forces which impeded its progress and some that accelerated it. Among these, the Black Death of 1348-49 must be recognised as the most important. This epidemic carried away between one-third and one-half of the English population, and the immediate result was that there developed an acute scarcity of men who could cultivate the land. the lords found that it was no longer easy to get agricultural labourers from money wages to cultivate their lands. Even some of their former tenant families were wiped out and their lands remained uncultivated. The lord thus faced the loss of income from their own land and also some of the rent from their tenants. The same calamity, however, strengthened the bargaining position of the surviving tenants, villeins and agricultural labourers. They could take advantage of the scarcity of labour, and demand favourable terms from the lord. The agricultural labourers secured a rise in their wages and the villeins, who were not freed, demanded commutation of their personal services, in terms of money rents. In face of acute scarcity of

labour and high wages, the lords saw the danger of commutation of the villiens' services. They, therefore, opposed further commutation, and even tried to retrieve their lost position by demanding, personal services even from those serfs whose services had already been commuted. The Black Death, thus, created a conflict of interests between the lords and the serfs in respect of commutation, while formerly both of them had regarded commutation in money rents, to be of mutual benefit. In this economic tussle, the serfs came on the top; because scarcity of labour had given them an irresistible bargaining position. The villiens' victory was not, however, won easily. There had to be peasants' revolts as in 1381, and much suppression by the lords. The commutation movement was even checked for a time. But the economic situation created by the Black Death nursed it on; and by the middle of 15th century, villeinage as tenure died out.

Liberation from Personal Bondage

The other type of emancipation—freedom of person—emerged out of the first one. When the serfs were no longer rendering physical services on the lord's land, he lost most of his interest in their bondage. Formerly the villeins' bondage was necessary for the cultivation of the lord's land. Now, that this land came to be cultivated by hired labourers, the lord had nothing to gain by continuing to bind the serf to the soil. Of course, he still claimed his other feudal dues; but these could be calculated in money terms and added to the money rents. Besides, some of the former serfs purchased their freedom from bondage by paying a price to the lord. They could also escape from the bondage by simply leaving the land and taking resort in a town or in the land of another inviting lord; and in those time and scarcity of labour, they were welcomed wherever they fled to. Thus, either by purchase of freedom or by escape or by the lord's indifference.

The villeins were able to free themselves, for all practical purposes. Legally, however, villeinage as a status was never abolished. A bill with this object was introduced in Parliament in 1537 A.D. but was rejected by the House of Lords.

The process of emancipation was only gradual but by the beginning of the 17th century, all trace of villeinage, either as a tenure, or as a status, had completely disappeared from England. Before the emancipation, the relation between the lord and the serf was practically one of the master and the bondman. After the emancipation, the serf became a tenant and the lord became a rent-receiving landlord. It should also be noted that the emancipation was achieved as a result of economic forces. The government was not instrumental in it, and if anything, the law actually refused to recognise the emancipation even when already achieved.

Emancipation in Other Countries

The above is the brief history of the emancipation of the serf in England. In other Western European countries, the emancipation followed the same lines. It was, however, late in coming and also very slow and halting. In France, agricultural feudalism was lingering until the Revolution of 1789 swept it off at one stroke. In 1793, the new government abolished all feudal dues without compensation to the lords and the former serfs were emancipated. In Germany, conditions in the Western and Eastern halves were different. In the west, emancipation had made some progress on English lines by the end of the 17th century. But in the Eastern half, serfdom was then present in all its rigour. The Prussian kings, however, could not tolerate its continuance any longer. They rightly appreciated that Germany would not be a powerful nation unless it changed its economic structure and followed the path of Agricultural, Commercial and Industrial

Revolutions as England, its chief rival, was doing at that time. The Prussian king, therefore, started as a first step, the emancipation of the serf by Royal Edicts. In 1808, feudal services and dues on Royal lands were converted into money payments. Since then commutation of the serf's services in all lands was encouraged. In 1827 villeinage as a status was legally abolished for Prussia. Other German states too emulated the Prussian example. The revolutionary upsurge of the people in 1848 further hastened the movement; and by 1867, emancipation was virtually completed throughout Germany. In Russia too emancipation was actuated by the king—Czar Alexander II. It was begun in 1851. Between 1861 and 1865, the status of the serf was abolished by law. Compensation was given to the lords for the feudal dues forgone by them and they were made to cede a certain portion of their land of the emancipated serfs. The idea was to prevent the serfs from being both landless and free and thus to become a menace to the peace of the country. The serf thus not only got his legal freedom but also some land. The land, however, was not actually given over to him. It was given over to the 'mir'—a common organisation of the cultivators of each locality. The emancipated serfs's freedom also, was in practice limited by the fact that he was allowed to move out of the village only with the permission of the mir. These were the conditions, till the end of the 19th century. In 1908, however, as a result of a revolutionary upsurge of people in 1905, the mirs were broken up and land was actually sold to cultivators. With the breaking up of the mirs, freedom of movement was automatically established.

In the U. S. A., we have already seen that there was no feudal agricultural organisation in the northern colonies, and hence there was no problem of emancipation at all. But in the southern colonies, slavery was widely prevalent and this had to go before agri-

culture there could be modernised. The task was accomplished by the Civil War, fought between the Northern and Southern colonies in 1860-64. The liberation of the slave was the chief bone of contention; and slavery was abolished with the victory of the Northern colonies.

Conclusion

Speaking comparatively about these movements of emancipation of serfs in different countries, it may be noted that the movement originated in England and spread eastwards on the continent. England became practically free from serfdom by the end of the 16th century. In France it had to be abolished by the Revolution at the end of 18th century. In Germany, the movement started only in the latter half of the 19th century and in Russia, serfdom lingered on till the 20th century. Probably the explanation of this sequence is that agricultural revolution had to be preceded by commercial revolution, and the countries saw the development of commerce exactly in the above order.

Secondly, it should be recalled that in England alone, the development was a purely economic and evolutionary phenomenon, in so far as it was not brought about by Royal decrees as in Germany or Russia or by a general social revolution as in France. This difference can be explained by the fact that as England was the first country, where new forces of commerce made their appearance, it was natural that English revolution should be the result only of economic causes. In Germany and Russia the kings could not wait for such a gradual transformation as they had to compete with England in the game of power politics. They were in an obvious hurry to modernise their countries, as their power in European politics depended on economic prosperity of their countries.

Thirdly, the emancipation of the serf produced unlike effects in different countries on the organisation

of agriculture. In England, it opened the way to enclosures. The lords enclosed their lands into big farms, both for pasture and for better cultivation. The small independent farmers could not survive in competition with the landlords; sold out their lands and thus the class of peasant farmers—the yeomanry—was wiped out. The emancipation combined with other causes, therefore, paved the way for large scale capitalistic farming in England. In France, on the other hand, the break up of lord's sway resulted into peasant proprietorship. The French lords tried to form their lands into big farms but their attempt was frustrated by the Revolution. The noblemen's feudal tenants became owners of their pieces of land and France became a country of small peasants. In Germany, the western and eastern halves produced different forms of organisation. The West developed peasant proprietorship, while the East, under the enterprising junker landlords produced large-scale farming on English model. In Russia, the serf was not emancipated fully until immediately before the War of 1914 and after the war, the whole aspect changed entirely as a result of Bolshevik Revolution. In the Southern colonies of the U.S.A., the liberation of the slaves led to the break up of large farming estates in the South. Much of the land fell out of cultivation for want of labour. The liberation, however, did not give land to the slaves. In European countries, the former serfs became owners of the land, they formerly cultivated. But in the U.S.A. the slaves were only freed. They could not lay any claim on the land on which they formerly worked. Thus emancipation in the U.S.A. only produced a landless working class, unlike as in European countries.

Sec. III.—Development of Land Tenure Systems

In the new set-up, there emerged four agricultural classes. (1) The non-cultivating landlord, (2) the cultivating or operating land owner, (3) the tenant

farmer, and (4) the landless labourer working on wages.

The non-cultivating landlord and the serf cultivator were the most characteristic institutions of feudalism. The lord got his land cultivated by serfs or by tenants—in England called copy-holders and leaseholders. The serf paid the landlord a sort of rent in terms of physical services and feudal dues. The tenants paid rent and the feudal dues in kind and money. The whole system may be described, therefore, as a sort of landlord tenant system. Of course, in different parts of Europe and from time to time, the form of the tenure was changing.

In England

The post-feudal period inherited much of this landlordism. In England, under the Consolidation Acts, the lords enclosed much of the arable and common land, on the ground that legally the ownership of the entire land vested in them. They then consolidated the different pieces of the enclosed land into compact farms of two hundred to three hundred acres each, and leased them to big capitalist tenants. The tenants invested capital and worked the land with the help of hired agricultural labourers. Much of English landlordism and capitalist tenant farming the large farms, thus emerged out of the wreckage of the feudal system. Added to this was the landlordism created by the confiscation of the Catholic Church land and its sale to noncultivating purchasers. Moreover, when the lords enclosed the common pasture and woodland and thus denied their use to the small farmers of the village for grazing their cattle and for gathering fuel, the position of the small farmers became untenable. They could not also stand the competition of the big tenant farmers. Many of them, therefore, gave up agriculture, sold out their small lands and migrated to the town or became landless labourers in the country side.

This expropriation further reduced the number of owner-cultivators and passed some more land to non-cultivating landlords. The result of these appropriations and transfers of land is the rise of big capitalist tenant farming in England. It is big, because the size of farms is large. The normal size is of about three hundred acres. It is capitalist farming, because the land is cultivated mostly by landless wage-earners working on the land, with the help of capital provided by the capitalist farmer. It is tenant farming, because the landlords, who are actual owners, lease out their land for farming to capitalist tenants. Birnie observes that according to somewhat unsatisfactory statistics of the New Domesday Book (of 1876), a quarter of the land was owned only by 1200 persons and a half by 7400 persons. In 1896, the Board of Agriculture reported that there were only 61700 yeomen farmers cultivating about 14% of total area. It has been recently estimated that only between a fifth and a fourth of the total area is in the hands of small proprietors, who farm their own land. The rest is cultivated by big capitalist tenants.

In France

In France, even before the Revolution of 1789, the lords had given over most of their land either to metayers (share-croppers) or to tenant farmers. Both were tenants, though of different varieties. The tenant farmers paid a pre-determined amount of rent to the landlord, over and above the feudal dues. Thus the risk in cultivation was borne entirely by the tenant, the landlord getting his settled rent, irrespective the conditions of the crop, at any particular season. The metayer, on the other hand, shared whatever produce of the land each season, with the landlord, usually on basis of fifty—fifty. The risk thus was shared equally by the metayer and the landlord. The Revolution wiped away all feudal dues of the tenants, but did not

touch either of the tenancy systems. France, therefore, inherited tenancy from feudalism, just as England did. Yet there was one essential difference. The Revolution, in destroying the class of nobleman, checked the formation of big consolidated farms of the English type. French tenancy, therefore, unlike the English tenancy, has been a tenancy of small farmers.

In Germany

In Western Germany, conditions were similar to those in France. The landlords had given over their land to tenants. In the East, however, the junker landlords managed their lands with the help of serfs and there was no tenancy. The process of the abolition of feudalism in Germany assumed features dissimilar to those in France or England. When Royal edicts abolished feudalism, the tenants of the Western Germany ceded about $1\frac{1}{3}$ to $1\frac{1}{2}$ of their land to the landlord by way of compensation and became peasant proprietors of the remaining land. In the East, the serfs were freed but did not get any land, and as there was no tenancy even in the feudal times, there emerged none in post-feudal times. The net result was that very little tenancy emerged from out of feudalism in Germany. Even in 1907, the land rented out formed less than 18% of the total land, and much of this was garden land or land used for non-agricultural purposes. The peasant proprietors formed the bulk of the agriculturists. In 1907 there were big peasants' owning between 50 to 250 acres of land each and they occupied $1\frac{1}{3}$ of the arable land. The 'middle peasants', owning $12\frac{1}{2}$ to 50 acres of land occupied another third of the total land and the 'little peasants' owning between 5 to $12\frac{1}{2}$ acres occupied $1\frac{1}{10}$ of the land. The rest was owned by petty farmers who also worked as labourers on other lands.

In U. S. A.

In the U.S.A., land was newly occupied by settlers and there was no legacy of feudalism. Land was plenti-

ful and new comers could get enough land of their own. Thus there was very little tenancy until recently.

In Japan the abolition of feudalism was so achieved that about $\frac{4}{5}$ of land came to be owner-cultivated and only about $\frac{1}{5}$ was held in tenancy, after the Meiji Restoration in 1868.

In India

In India of the middle ages there was no feudalism of the Western type. The cultivator was generally the owner of the land, if anybody in those times could be called owner at all. Still there were some landlords who occupied land more than they could cultivate themselves, and thus hired out a part of their land on terms determined by tradition. The proportion of land cultivated by owners, to land cultivated by tenants is difficult to ascertain.

In modern times, however, the system of holding and cultivating land have become extremely complicated, since the advent of the British rule. The systems that have emerged may be roughly classified in three divisions. (1) The Zamindari where one or a few persons were recognised as proprietors of the entire land of a village and the actual cultivators were recognised only as tenants of the proprietors. The government entered into contracts with the proprietors regarding the revenue to be paid to government on a permanent or temporary basis. It also reserved right to intervene in the relations between the zamindar and the cultivator in the interest of the latter. The zamindari tenure covers mainly Bengal, Bihar and some part of U. P. and Madras. About 130 million acres or $25\frac{1}{2}$ of the area of British India was under permanently settled zamindari.

(2) Secondly, there evolved the Mahalwari or joint-village tenure where the village estates were held by co-sharing bodies or village communities, the members

being jointly liable for the land revenue. Most of the area under this system was cultivated by tenants. About 197 million acres or 39% of British India was under temporarily settled zamindari or mahalwari tenure. The Mahalwari system obtained mostly in the U. P., the Punjab, and in some parts of the C. P.

(3) Thirdly, there appeared the ryotwari system in which, the government settled with each individual holder of the land. In this system, evidently, the settlement did not impose any proprietor upon the actual holders of the land. The Ryotwari tenure covered about 183 million acres i.e. 36% of the area in British India.

It is clear from the foregoing account that the British Government neither respected the old custom regarding land tenure, as has been pointed out in an earlier section, nor followed any consistent policy of their own. They introduced the permanently settled zamindari system in Eastern India, simply because Lord Cornwallis, the Governor of Bengal thought it convenient in 1793 to entrust the work of revenue collection to certain recognised revenue-farmers or proprietors. In other parts, Mahalwari and Ryotwari were adopted instead of the Zamindari because they appeared most convenient to the officers in charge at the time. It may be said that different judgments on the part of different authorities of the British Government in India have crystallised in this mosaic of tenure systems.

Thus, due to the particular methods of settlement, most land under Zamindari and Mahalwari tenures, comprising about 64% of land cultivated in British India came to be cultivated by farmers who became tenants. But tenancy was not only limited to this. Some land under Ryotwari area too passed under tenancy and it was estimated that about 75% of cultivated land was cultivated by tenants.

The transfer of land from the cultivator-owners to non-cultivating landlords went on progressively. Many of the small cultivating owners could not make farming a profitable enterprise. Debt mounted up and ultimately the right of ownership was sold out, often to the money lender. The Punjab government tried to stop this transfer of land to non-cultivating owners and the consequent rise in tenancy, by the Land Alienation Act (1933). Obviously such Acts could not stop the rot because they could not prevent farming of very small peasants from being unprofitable.

Tenancy—Evils and Remedies

The system of tenancy is not to be condemned only because the right of ownership is not vested in the actual cultivator. The system gives rise to several evils. The pressure of population on land increases the number of intending cultivators and the rack-renting landlord is able to take advantage of the cut-throat competition between them. The tenants agree to pay more than what they can afford, land themselves in debt and court the consequent evils. The absentee landlord is interested only in rent, sucks land to the utmost and is reluctant to invest capital to increase the productivity of land. The tenant is already a poor man without capital and the land thus goes unimproved, unmanured or unirrigated. Productivity of land naturally suffers.

The tenant, moreover, can be turned out of it, if there is another tenant bidding higher. He does not feel any security in his tenure and is reluctant to put in his best in the improvement of land, which he may be asked to leave any year. Even if he has capital, he avoids investing it in his land, lest he may lose it, if ejected. The tenancy system thus at its worst, keeps capital away from land, undermines its productive efficiency, leaves the cultivator insecure in his shoes and gives rise to one of the worst types of exploita-

tion. The cultivating mass of society sinks in poverty and pulls down the whole society too.

The Government of India tried to remedy the situation by occasionally passing some laws. At the time of permanent settlement in Bengal, the Court of Directors of the East India Company had reserved to them the power of intervening in the interest of the tenant. This power, however, was scarcely used. Instead, the landlords, being influential with the bureaucracy got the government pass laws which increased the power of the landlord over the tenant. The tenant was even made liable to be punished if he preferred litigation against the landlord. Naturally enough, the condition of the cultivator deteriorated progressively and the government had to pass the Bengal Rent Act in 1859. Accordingly it was laid down that rent from cultivators who were cultivating the land from 1793, could not be raised. Similarly, rent from tenants who cultivated the land for more than twelve years continuously could be increased only on specific grounds provided in the Act. The latter provision, however, proved totally ineffective, and the landlords awoke to see that in future no tenant cultivated the same land for more than twelve years, thus qualifying for the protection afforded by the Act. In 1885 protection was afforded to all settled cultivators even though not cultivating the same piece of land. In 1928, occupancy holdings were made transferable on certain conditions without paying any fee to the landlord.

All these laws, and similar legislation passed in other provinces proved ineffective in improving the position of the cultivator, firstly because very little indeed was granted under the laws, and secondly because the laws were not vigorously enforced even as far as they went. The inherent indifference of the bureaucracy and the ignorance and poverty of the tenant combined to allow the situation worsen progressively.

A renewed reform-activity was witnessed since the advent of Provincial autonomies in 1937. By then the condition of the tenants all over India had deteriorated still further due to increasing pressure of population on land. All the Provincial governments, passed Tenancy Legislations with a view to give some protection to the tenant. The general objectives were (a) to put a limit on enhancement of rent, (b) to prevent arbitrary ejection of the tenant, (c) to afford him compensation at the time of leaving any land, for the improvements he might have made, (d) to confer occupancy rights—including inheritance and transfer on tenants who had tilled the land for some years, (e) to determine interest rates on arrears and protect cattle, seeds, tool, etc. from attachment, (f) to provide that suspension of land revenue should correspondingly benefit the tenants also and (g) to protect the tenant from 'veth' and other burdensome impositions.

Agricultural Labourers

The emergence of agricultural labourers on a mass scale is a peculiar product of the modern reorganisation of agriculture. In feudal times, all the cultivators, and tenants, had some land to cultivate for their subsistence. The lord was under obligation to provide land for the subsistence of the serf. Besides, land was relatively less scarce, and intending cultivators were not required to work on other men's land. They could easily get still unoccupied land for themselves.

We have already seen that, under the feudal arrangement, the commutation of the serfs services gave opportunity for the emergence of agricultural labourers. When the serfs ceased to cultivate the lord's land, he got it cultivated by hired labourers. It will be seen that, without the introduction of money economy, both commutation and employment of agricultural workers might have been impossible:

In the modern times, the following factors have given rise to the masses of agricultural labourers. In the first place, the liberation of the serfs and slaves turned them into agricultural labourers working for wages. In some countries like England, France, West Germany and Russia, the liberated serfs were given some land. But in the East Germany and the Southern colonies of the U.S.A., the serfs and slaves were only liberated, but not provided with land. In the process of liberation, they lost their rights against their masters along with their obligations. In the liberated state, therefore, they could not but be agricultural labourers. Secondly, the unprofitable character of small agriculture has progressively turned the small land-owners into tenants and ultimately into agricultural workers. In the long run, small agriculture runs in loss. The small land-owners, therefore, first mortgages the land, later on sells it and becomes a tenant. Ultimately he loses even his small equipment and capital and has to become only a landless worker. Thirdly, the decay of many of the village industries has thrown the artisans on to agriculture as landless labourers. Fourthly, the excessive growth of population in all countries has swelled the numbers of landless labourers. Formerly the small total production from land checked the growth of population, even by starvation. In the modern times, however, the total supply of food from old and new lands has increased enough to sustain a big population. Fifthly, with better methods of farming using manures and machinery, agriculture has become an enterprise of substantial capital. Consequently, the small farmers who do not possess the necessary capital have been driven to the ranks of agricultural workers. They could not stick to their old methods, because with them, they could not stand the competition of large-scale capitalist agriculture. We have already seen, how the enclosure movements in England established large-scale capi-

talist agriculture and made the position of small farmers untenable.

As a result of the working of these forces, the number of agricultural landless workers has gone on increasing in all countries. In fact, agriculture has been the resort of all that are refused in other lines of employment. But agriculture too cannot provide enough land for all. The excess of population in the country side, therefore, appears as landless workers.

The plight of all workers in the modern economy is indeed miserable; and that of the landless agricultural workers still more so. Besides suffering from the exploitation, which capitalist economy inevitably visits on the workers, the landless agricultural workers suffer from other difficulties too. Their real wages are lower than industrial wages. They have no regular employment; because agriculture itself is not a perennial occupation. They are not protected by the ordinary labour legislation, as they work with small employers to whom the legislation is not applicable. Their organisation into labour unions also becomes difficult, as they are scattered. Moreover, they are relative poorer and more ignorant than the urban industrial workers.

CHAPTER IV

TECHNICAL REVOLUTION IN FOREIGN COUNTRIES

Section I.—Old Hindrances

We have already described the feudal methods of agriculture in Europe. It will be recalled that the old agricultural methods suffered from the following hindrances to progress. (1) Firstly, as markets were only local, and agriculture was only for subsistence, there was no incentive to progress. Most of the cultivators were serfs. They were required to put in labour first on the lord's land. Their land too belonged to the lord; and it could be taken away from them at any time, may be, in exchange of another piece. Under such circumstances, it is no wonder that the cultivator was apathetic to progress. (2) Secondly, the open-field system was not conducive to individual enterprise, even if any individual had the courage to harbour uncommon ideas about the technique of agriculture. (3) Thirdly the serf had no capital, to make improvements or to experiment. The yield of the land was poor and besides the lord deprived him of all that he could produce over and above his bare requirements. The lord had the leisure and resources to improve agriculture. But he was too busy in political, administrative and military affairs, to pay any attention to the betterment of agriculture.

Besides these social hindrances, there were physical facts which militated against progress. (4) The soil always showed the tendency to deteriorate if crops were taken year after year without break. The land

had to be left fallow once in 3 years—without crops—in order to enable it to recuperate its lost quality. This defect could have been overcome only by manuring; but the only form of manure that was available, was the cattle dung. And this was scarce as the number of cattle was very rigorously limited by the scarcity of fodder, especially in winter. (5) In fact, as has been noted, the fodder problem necessitated the open-field system, as it alone would allow cattle to roam about wherever they pleased in search of fodder.

New Developments

In the new set up of things, these hindrances were overcome gradually. (1) The commercial and transport development created and expanded markets. Money economy came to be introduced, enabling cultivators to sell their surplus—produce. Serfdom disappeared, and the liberation created self-interest in better agriculture on the part of the cultivators. Thus the essential condition of progress—namely the inspiration of the will to progress was fulfilled. (2) In feudal times, the lords who alone had capital to invest in land, were engaged in non-agricultural pursuits. But with the break-down of the feudal structure, and the establishment of a strong monarchy or democracy, capable of maintaining peace and administering the country with its paid servants, the lords lost their feudal tasks and some of them turned to the betterment of agriculture. In England, where scientific agriculture was born, it was the lords like Townshend, Bakewell, Tull and others who experimented and brought about revolutionary changes in the methods of cultivation. The Prussian Junker landlords also emulated the English lords in improving their agriculture. Besides, the state too took up the question of improvement of agriculture. In France and Germany in 19th century, the state helped by providing cheap transport, giving bounties and protection among other things. Later on, since the end of 19th century governments of all countries

took active interest in organising research, training crop-control, disease-control, irrigation-facilities etc. (3) Thirdly, the open-field system was abolished with the breakdown of feudalism, and especially by the enclosure and consolidation movements, wherever they took place. (4) The problem of both manure and cattle fodder was solved by the introduction of root-crops. The credit for this revolutionary change goes to an English lord—Townshend. The root crops of clove and turnips provided winter fodder for cattle. They could be grown on the lands to be left fallow, as they did not exhaust the soil. Thus, fallowing with its consequent waste, was abolished. The root crops were alternated with cereal crops. The new rotation of crops was wheat in first year, clover in the second barely in the third, and turnips in the fourth.

Scientific Progress

Once the old hindrances, which were barring the progress of agriculture were overcome, agriculture moved out of age-long stagnation. When it was realised that the yield of land could be increased by improving the technique and that the increased yield had a ready market, agriculture began to improve rapidly. The age of science had begun and was working wonders in the industrial field. It was natural that agriculture too should catch up the scientific creed; and various positive improvements were made. Jethro Tull in England invented drill sowing, deep ploughing and machine hoeing. Smith of Deauston in Scotland invented draining by means of cylindrical tiles of burnt clay. Bakewell in England applied the scientific method even to the cattle and sheep breeding. Arthur Young and Holkham travelled widely and propagated the new systems. A German Scientist—Liebig announced in 1840, the chief constituents of plant-life; and artificial manures made of potash, phosphorus and nitrogen became possible.

The dependence on cattle manures was gone, and intensive agriculture made immense strides. Machines were devised for all agricultural operations and large scale farming was made possible. By 1860 there was no operation in agriculture which could not be done by machinery. The state also contributed to this advance by organising research in soil preservation, improvement of seed, irrigation, propagation of better methods of farming etc.,

Large-Scale Cultivation

With these changes, the scale of farming also underwent change. The enclosure movement had already made the position of small cultivators difficult. With the introduction of machinery, artificial manures and rising rents, scientific cultivation became a matter of big capital; and small scale farming yielded place to large scale farming.

In England, particularly, the tendency towards large scale farming was most marked. After the consolidation, fifty acres were considered a small holding. The normal holding was of about 250 acres and a great many was very much bigger. Only between a fifth and a fourth of the total area was cultivated by small farmers.

In France the substitution of large scale farming for small scale one, was arrested by the French Revolution. The lands of big landlords were confiscated and sold out in small pieces either to actual cultivators or to small capitalists. Moreover, the former serfs became owners of their small pieces. There was no enclosure and consolidation movement as in England. France, thus became for ever a country of small farms. Before the first World-War, the number of agricultural holdings were estimated to be about $5\frac{1}{2}$ millions, of which 97 per cent. were less than hundred acres in extent. The number of holders in France was actually greater than that of agricultural labourers, $5\frac{1}{2}$ million holders against $3\frac{1}{2}$ million labourers.

In Germany, conditions differed between Eastern and Western parts. Enclosure movement could progress only in the Eastern plains owned by Junkers, and hence the size of holdings in the East was larger than that in the West. Yet on the whole the small holdings predominated. In 1907, holdings over 250 acres comprised only 22% of agricultured area of the Empire. In 1916, half the arable area was comprised of small farms of less than 50 acres.

In the U. S. A., land was plentiful for colonizers upto 20th century. The size of holding, therefore, tended to be large. The plantations of cotton, tobacco and sugar-cane of the Southern colonies which were cultivated by the slave labourers, were most advantageous when they could be of largest dimensions. Therefore, the size of holdings in the South was very much larger than that of the Northern colonies, where slave labour could not stand the cold climate and hence cultivation had to be done by white owners themselves. The emancipation of slaves in 1862 led on to the break up of southern large estates as is shown in the following figures given by census of 1900.

Average size of farms in acres

	1850	1900
North Atlantic	112	96
South Atlantic	376	108
South Central	291	155

The Federal Government first used to sell land to new comers in pieces of 660 acres, but the policy was changed by the Homestead—Act of 1862 and pieces of 160 acres came to be given free to actual settlers. In effect, the average size of holdings in America comes to be nearly the same figure of 160 acres, though at the extremes there are some holdings covering one, two or even three hundred thousand acres and at the other extreme holdings of only 20 acres, possessed mostly by the liberated negroes.

In Japan, the size of holding has remained small at about 2 to 3 acres, possibly because the chief crop is rice, and rice requires meticulous attention and intensive cultivation. Besides, the hilly nature of the country puts large farms out of question.

Section II.—Technical Development in India

Old Hindrances

In pre-modern times, agricultural technique in India too suffered from defects inherent in the environment. In the absence of transport facilities, the market was only local. In fact most of production was only for subsistence of the cultivator and the owner of the land. Tradition and custom had fixed up the methods of cultivation and the cultivator knew that if he followed them, the land would yield the normal crop, which he himself and even his forefathers were accustomed to. In those old times, the cultivator could not think of producing mainly for the market as he does now; and hence there was no incentive to increase the produce. The troubled political conditions depressed the will to progress. The cultivator was helpless against invaders and also against the arbitrary powers of the officers of his own government. At the outset of his reign, Jahangir gave orders that officers should not usurp the cultivators' lands. This clearly shows that the usurpation was so prevalent as to need royal attention. Da Laet, a traveller, recorded that the common people were much harassed and often compelled to change their lands every season, only because the officers of Government willed it. Another traveller, Bernier, also tells that due to oppression of officers, the cultivators felt so much insecurity that much land was falling out of cultivation. This, of course, may not be the general state of things throughout. But the instances point out how political insecurity might have adversely affected cultivation.

New Developments

Under the British regime, some of the old hindrances were removed. (1) In the first place, rights regarding land were clearly defined and recorded. True it is that, in the zamindari tracts, the cultivators were rendered tenants and victimised by the rack-renting landlords. This proved certainly an obstacle to progress. Yet in Ryotwari tracts, the cultivator was assured of his possession of land and the government promised not to enhance the assessment of revenue, if the increase in productivity and income was secured as a result of improvements made by the cultivator. In any case, the old order, where cultivators could be made to give up their lands on arbitrary order of Government officials had changed. The rule of law had begun. (2) Secondly, the Development of railways and roads internally and that of shipping externally opened wide markets for agricultural produce. Money economy was substituted for barter economy. The agriculturist could now visualise the prospect of producing a surplus above his own requirements and selling it in the national or international market. An urge to produce more, which was lacking formerly, was thus created. (3) Thirdly the same development of transport enabled the commercialization of agriculture. When movement of food-grains and other agricultural crops like cotton was well nigh impossible for want of transport facilities, the agriculturist was constrained to produce his own food and other requirements from his own land. With the development of transport, however, the agriculturist could concentrate on the production of only that crop for which his land was best suited. He could now sell this crop in the market and buy in exchange his requirements. Development of transport thus led to division of production, with all its advantages of increased productivity. We, therefore, find that different regions in India have concentrated on the production

of different crops. Bengal has specialised in jute, Assam in tea the U. P. in sugar-cane and wheat in Punjab, C. P. and Bombay in cotton, Madras in rice and so on. The specialization of production—and the consequent commercialization—are reflected in the following figures. In 1913-14, nearly 18% of the total cultivated area in British India i.e. is about 48 millions of acres was under non-food crops. About the same time, India exported cotton worth 336 lakhs, of rupees raw jute and jute products worth 52.9 lakhs, grains, pulses and flour worth 32.8 lakhs, oilseeds worth 12.1 lakhs and tea worth 17.5 lakhs.

Aspects of Technical Development

The above mentioned factors have helped the technique of Indian agriculture by opening out possibilities of progress. But by themselves they are passive or permissive in character. The progress in the technique must, therefore, be looked with reference to certain positive forces that must be working. The following are the main lines, on which progress has been attempted or at least contemplated.

(1) **Soil Fertility.** It is evident that from the point of productivity, the quality of the soil is of the greatest importance. If the soil is deteriorating, the productivity is bound to fall; and it is contended by many experts and economists that the Indian soil has been continually deteriorating with progressive reduction in productivity. The Bengal Banking Enquiry Committee observed in 1930 that "the fertility of the agricultural land is deteriorating steadily on account of the absence of manure. The yield of different crops has become less and less." Dr. Radhakamal Mukerjee also tries to prove the same thing on the ground that in U.P. the density of population of the old inhabited districts is falling while that of newly habited districts is rising. The fact that the soil does not get any manure and is being cultivated relentlessly year

after year are also brought in to substantiate the same argument. The case appears plausible enough, and especially if we note the fact that with increase in population, cultivation has been extended to inferior soils. The Agricultural Commission (1916) also noted that though no exact proof was possible from the data collected, they were of opinion that by exhaustion the soil had ultimately reached a balance from which no further deterioration was likely under the existing conditions of cultivation. Some experts, however, have contended that the soil is not progressively deteriorating. But in any case all are agreed that the soil is not improving, and the general opinion is that the present state of the soil is far from satisfactory. This being so, we must note that in respect of the quality of the soil, Indian agriculture has not definitely made any progress and, if anything, it has actually regressed.

(2) Manure: The quality of the soil is maintained and enriched only by manures. If the crop is taken year after year, without adding any manure to the soil, it gets exhausted and loses in fertility. The old methods of manuring were mainly, leaving the land fallow or ploughing the vegetation growth back into the soil or adding farm-yard manure. It appears that in old Indian agriculture, all these methods were practised by the Indian agriculturist. But once again, in the present Indian agriculture there has been positive retardation in this respect. The pressure of population on land has been such that hardly 7% of the cultivable area is left fallow annually. For the same reason, the method of ploughing back the vegetation growth is not being followed at all. Farm yard manure consists mainly of cowdung, urine-earth, remains of fodder etc. But none of these manures is added to the soil. Of course it is not that the present agriculturist does not know the importance of manuring but he is simply unable to do it, as he is constrain-

and thus carrying away valuable soil with it. In other advanced countries like America, the new technique consists in checking flows by suitable number of dams at power places on the rivers, as in the Tennessy Valley Authority Scheme. But India has so far not seen any effective effort on these lines. The present position remains that old checks on soil erosion have been withdrawn and new ones have not been provided.

(4) **Irrigation.** The importance of irrigation for Indian agriculture can not be overemphasised. The monsoon rains which water the soil and on which our cultivation mainly depends have proved most uncertain. Agriculture has become a gamble in rains. The uncertainty of rains breeds insecurity which is most harmful in its effects. The cultivator uses confidence in himself and becomes fatalist. All the urge for progress is thus nipped in the bud. The uncertainty of rains also compels the cultivator to go in for only those varieties of crops which are calculated to stand the drought better, even though they may not be suitable from other points of view. The agriculturists again can not risk investment in manures etc. because they increase his stake in agriculture and land him in bigger losses if the rains fail. Irrigation by means of canals, well or tanks removes this dead weight of uncertainty and makes way for more intensive cultivation. In most of the irrigated areas crops can be reaped twice a year and the crops can be of richer variety too. There develops an urge to improve the methods of cultivation also. In fact it has been found that agricultural methods are more advanced in these parts which are comparatively immune from the vagaries of the rainfall.

Some progress has been made in respect of irrigation in modern India. Uptil the end of the last century, the country was periodically visited by severe famines due to failure of rains and the Government's attention was forced to this problem of irrigation.

During the last fifty years, therefore, the Government have spent about 150 crores of rupees in constructing canals. The major irrigation works are situated in the Punjab, Sind, U.P., Madras etc. The problem of irrigation, however, has not been completely solved as yet, but out of a total cultivated area of 260 million acres, only 32 million acres are irrigated either by canals wells or tanks. It is, therefore, clear that irrigation must be pressed much further. Canal construction must be undertaken wherever possible; when it is not possible, agriculturists must be enabled to sink wells or to lift water through bores by means of electric pumps.

(5) **Improved Seed And New Crops.** There has been some progress in respect of improved varieties of old crops and introduction of some new crops. Tea and Coffee plantations are exclusively the products of modern times. Similarly such new crops like potatoes, tomatoes, cinchona has been introduced on an extensive scale.

Scientific research has been able to discover improved varieties of rice, wheat, cotton, jute, sugar-cane etc. Yet the benefit to the general agriculturist has been only slight. Excepting sugar cane and jute, where improvement of crop is substantial, the introduction of improvement of crop is substantial, the introduction of improved varieties and of good seed has been very slow and tardy. Only about 20% of the area under wheat and cotton and 5% under rice, groundnuts, millets and grams has benefitted from the advance made by research. The main obstacles seems to be the indifference of the cultivator and the scarcity of supply of improved seed grown on Government farms.

In spite of whatever improvement has been affected in this direction, it can not be said that Indian agriculture of to-day registers positive improvement over old agriculture, in respect of the quality of seed. Formerly, the cultivator took care to select and pre-

serve his seed from out of his annual produce. Latterly, however, due to scarcity of produce in relation to need, he cannot afford even to spare that much amount of selected grains from out of his total produce. The practice has, therefore, been adopted, of selling or utilising the whole of the produce initially, and of purchasing back for serving whatever quality of grain is available in the market, with the help of borrowed money.

(6) Implements, Livestock and Machinery. The progress in this respect is the least notable. The implements used by the agriculturist now are the same age-old ones used by his forefathers, the plough, the spade and the sickle. In this age, when in America and in other western countries, all operations in agriculture like, bunding, terracing, ploughing, sowing, harvesting, threshing, binding, cleaning, grading etc. are done with the help of machines, and consequently cheaply and efficiently. The general Indian agriculturist is still confined only to what human labour with the help of cattle can achieve. The substitution of an iron plough for a wooden plough here and there is not a change in implements worth the name. The agriculturists tools have been slightly battered no doubt, but they have still remained tools. They have not yielded place to more efficient machines.

The motive power for strenuous operations like ploughing and water-drawing still remains the cattle power. The bullock has still not been substituted by oil-engine as in other countries. It is still used for ploughing, watering, threshing, carting etc. It is also still depended upon as a source of fuel and manure (cowdung). This excessive dependence on the cow and bullock by itself smacks of primitive type of agriculture. And even regarding the quality of cattle, the position is far from satisfactory. It is also possible that it has worsened progressively by the increase in

numbers of cattle. The Agricultural Commission observed, "Having regard to the poor quality of grazing available, and to the fact that it fails to afford adequate maintenance for cattle at the season when fodder grown on the cultivated land is scarcest, we are of opinion that this number of cattle is a heavy stock for the land to carry." In fact the position has moved in a vicious circle. Cattle have got to be too many because their capacity of work is low and their capacity is low because, being too many they are poorly fed. There have been no notable efforts in modern India to improve the breed of general cattle. The advance scientific technique of breeding is restricted only to Government farms and does not reach the general cultivator at all. There has been no movement of cattle-improvement in India corresponding to that started by Bakewell in England nearly hundred and fifty years before.

Agricultural machinery has been conspicuous by its total absence except on some few big estates.

Estimate And Conclusion

The result of all this is that Indian technique lags behind while agricultural technique in the world is rushing ahead. A comparative table of productivity per acre in India and in other countries will reveal how India stands in the world context.

Quinquennial average (1932-36) in quintals
per hectare

Crop	China	Japan	France	U.S.S.R.	U.S.A.	India	Index of Indian Produce to World Produce
Rice	25.6	36.0				13.7	44.4
Wheat	11.1	13.8	15.9	7.8	8.3	7	58.8
Cotton	2.4			2.4	2.1	.9	39.1
Groundnut	18.2				7.9	10	63.3

The table clearly brings out the short-comings of the technique adopted in India compared to the technique abroad.

Curiously enough this difference has been caused only by modern advances in other countries. Before the agricultural revolution in other countries, the Indian agriculturist probably compared well with agriculturist in other parts of the world. He had inculcated all the wisdom that long tradition gives. Reviewing Indian agricultural methods at the end of the last century. Dr. Voelckar observed "to take the ordinary acts of husbandry, nowhere would one find better instances of keeping land scrupulously clean from weeds, of ingenuity in devise of water raising appliances, of knowledge of soils and their constituents, as well as the exact time to sow and to reap, than one would in Indian agriculture, and this not at its best alone, but at its ordinary level. Certain it is that I at least have never seen a more perfect picture of careful cultivation combined with hard labour, perseverance and fertility of resource, than I have seen at many of the places in my tour". So also another agricultural expert Sir John Russell, "The Indian ryot compares favourably with any of the peasant populations I have met in different parts of the world."

This is indeed very high tribute paid by Western experts to the Indian agriculturist; and we may not grudge him the credit. Yet the fact remains that compared with agriculture in other parts of the world, Indian agriculture hardly comes out with credit in respect of productivity. Thus on the one hand, the Indian agriculturist as a craftsman seems to be an accomplished one and on the other hand the product is thoroughly unsatisfactory by modern standards. The explanation of this discrepancy perhaps lies in the fact that the environment and resources with which the cultivator works are far from satisfactory. We have

already described above on what lines Indian agricultural technique needs improvement. Let us now see why improvement has been withheld.

Dr. Gadgil writes: "In the best cultivated parts—such as those mentioned by Dr. Voelcker in Coimbatore, Mahim, North Gujarat—the standard was very high indeed. But even in those tracts where the actual practice was not high, ignorance of the right methods on the part of the cultivators could not always be deduced. In most parts the value of fallowing or rotation of crops and of manures was well understood, and except perhaps, for the selection of seeds, there was little to be improved upon in the best cultivation. But the practice of all those depended on the circumstances of the cultivator. Thus the scarcity of firewood compelled people to burn their most valuable manure, the pressure on land made them forego the practice of fallowing, and their poverty, which compelled them to sell the whole crops at harvest time to pay the money-lender's interest and the government assessments and consequently to buy their seed every year from the money-lender, prevented any careful seed selection."

The poverty of the cultivator is the villain of the whole piece. The cultivator was poor because the yield of the land exceeded very little his requirements for subsistence; and whatever surplus there could be, was taken away by the rack-renting landlord, by the money-lender and by the government. This was the state of the cultivator the world over until modern methods adopted in Western countries enabled the cultivator to reap much more than what his bare subsistence needed. In India, the cultivator now finds himself in the same old predicament, as there has been no revolutionary improvement in technique or social environment as would relieve him of his anxiety at least for subsistence. In Western European countries, the rich landlords and the government brought about

a revolution in agricultural technique. In India the foreign government perhaps very naturally indifferent to the cultivator's interest and the landlords used their brains and money power in exploiting him to the utmost. Agricultural technique could have been bettered by irrigating the land by means of wells or tanks, if not by canals, by bunding and terracing, by protecting the soil from erosion by means of weeds and terraces, by manuring land by means of farm yard or artificial chemical manures by employing machines on large-scale farms. Yet all this involves capital and assurance to the cultivator that he will not be exploited. But poverty of the cultivator and indifference of the landlord and the government made capital investment impossible and the systems of landlordism and money-lending assured no protection but utmost exploitation of the cultivator. Growing population imposing itself on agriculture and the decay of supplementary occupations of the cultivator added their own quota.

The pressure of population is clearly borne out by the progressively diminishing size of holdings in India. Dr. Harlod Mann, Director of Agriculture in Bombay, published in 1917 the results of an inquiry in a typical village in the Poona district. According to him the average holding was 40 acres in 1771, 14 acres between 1820 and 1840 and 7 acres by 1914. Out of these holdings, in 1914-15, 60% were less than 5 acres, and another 20% were between 5 and 10 acres.

According to Dr. Rao in recent times, out of 22 lakhs of registered holders of land in the Province of Bombay, no less than 10 lakhs had holdings of below 5 acres in size. According to the Floud Commission (1939) the average area per head of population in the Madras Province was less than 1 acre and 74% of ryotwari holdings covering 36% of total area were of an average area of 2.4 acres. In Bengal, the tale was the

same. 41.9% of holding families held not more than 2 acres each and another 20% held between 2 and 4 acres. In the Punjab, according to Dr. Calvert, about 56% of holdings were less than 5 acres. In the U.P., according to Dr. Radhakamal Mukerjee, the average size of holdings in many districts was less than 3.5 acres.

The above figures clearly bring out how the size of holding is very small all over India. The figure may be compared to those given earlier about the Western countries. In England, 50 acres is considered a small holding, while in India the average holding is not even of 5 acres.

The size of the holding is important both from the point of the technique of agriculture and the agriculturist's standard of living. The very small size of holding in India is not sufficient to maintain even one agricultural family in a decent standard of living. It is not enough to give full employment to the family even. The cultivator is not able to make his both ends meet and runs in debt. The small holdings—which may be called uneconomic because they do not provide ample scope to the cultivator's labour—thus lead to the utter poverty of the cultivator and disable him from attempting any improvement of technique. Moreover, small holdings do not make even well-irrigation worthwhile, and use of machines is rendered impossible.

The evils are further aggravated by the fact that even these small holdings are not in compact blocks. They are divided in scattered strips i.e. they are fragmented. In effect, the cultivator can not pay constant attention to all the strips. There is wastage of time and energy of both men and cattle, in going from one strip to another. The scattered strips increase the number of boundaries and lead to wastage of land under demarketing bunds, and to increased litigation.

In Western countries, there was a veritable agricultural revolution. The system of possessing and owning land changed. Open field system and collective farming gave place to enclosures and individual enterprise. The implements of cultivation changed. The old horses driving the plough were replaced by machines. Methods of manuring were revolutionised. The small scale cultivation of the poor serf was replaced by large-scale cultivation of the capitalist farmers. The government's helped by granting protection from foreign competition by organising research and by enacting necessary laws. The phrase Agricultural Revolution is justified, in its use in describing these spectacular changes. In India on the other hand, there have been no changes which can be called revolutionary. The same old landlord—tenant relationships continue. There was no serfdom to be abolished in India. The scale of farming remains the same. There is very nearly the same lack of irrigation, manures, selected seed etc. Cultivation is carried on with the barest amount of capital required viz. the wooden plough, the spade and the bullock. The cultivator is the same old illiterate, fatalist, ignorant, poverty ridden small man without means. The government until recently, went on in blissful indifference. Can it be said that there has been an agricultural revolution in India? Changes that have taken place are just slight improvements in the same old grooves. In India there has been at best a slight improvement if at all, and certainly not a revolution.

CHAPTER V

THE OLD INDUSTRY AND ITS EVOLUTION

The Old Cottage Industry

It is but natural that in a village not in contact with outside world for most purposes, the villagers themselves should try to produce the industrial goods they needed. Land satisfied their primary need of food. Other essential needs were of clothing and housing in peace time and defence weapons when security and peace was threatened. All village industries, therefore, turned naturally round these few needs. Production and preparation of food necessitated the making of implements for agricultural operations and utensils for household purposes. The carpenter, the blacksmith, and the potter were thus necessary auxiliaries. Their crafts too could be plied with the material available in the village itself. The carpenter and the potter worked on the wood and mud, easily available in the village. Iron, of course, had to be brought from outside, if the old scrap of the metal itself was not to be used; and axes, ploughshares, nails etc. were made or mended. About the clothing needs of the village, the village spinners and weavers could look to it. In fact, spinning was done by all in their spare time. Cotton, wool, flax silk etc. could be used as clothing material. The village weaver weaved the yarn into suitable cloth. Tailoring was not a specialized business and was done by the women in their spare time. The implements required for the clothing industry including the spinning wheel and the handloom

could be made or mended by the village carpenter. Housing was not a specialised industry. The village carpenter and bricklayer, if any, could build cottages with the help of ordinary unskilled labour. The village cobbler further fashioned the hides and skins of the village cattle into necessary leather articles like shoes, straps, belts, water-bags etc. The village thus did produce most of the industrial goods. In absence of easy facilities of communication and trade it had to live by itself, and as such had to provide for its own requirements or to limit its wants to the available goods. In fact, apart from the essential requirements of life noted above, more complex wants did not possibly make themselves felt at all. For, after all wants of non-essential goods are dependent upon the environment and can develop only with the prospect of making more varied and abundant goods.

Self-sufficiency, at least in essential goods was thus a notable characteristic of the village industry. Other characteristics may also be noted here. As can be easily guessed, the standard of production in respects of quantity, quality and variety of goods, was very low not only in comparison to modern goods but also in comparison to goods produced in certain towns of those times. Skilled specialization was not possible for the village artisans, in view of the very small local market. Thirdly, it may be noted that the village artisan did not live by his industrial craft alone. His total production being small, the craft could not earn for him enough livelihood. He eked out his living from some supplementary agriculture on his own land. This fact throws into relief the subsidiary position of industries in the village economy.

These characteristics marked the old village industries in almost all countries. The village Industry in India too was no exception. But in addition to these it displayed certain other peculiarities. Under

the influence of the Hindu religion and culture, the artisans plying different crafts came to be stamped as belonging to particular castes. The caste of a person was determined by his birth in a family belonging to a certain caste, and the caste of the family carried with it a particular occupation. The craft thus became hereditary occupations. The members of a caste were not free to take up other occupations; but their own field was reserved for them from encroachment by others. The caste system thus prevented any mobility of labour as between different crafts. It throttled competition and thus the village industry lacked that urge and quest for progress which competition might have provided. The caste-system, however, was not without compensatory benefit. By restricting members of certain caste to particular occupations, it ensured for ever a full complement of all types of industries to the village and helped its self-sufficiency.

Another distinctive feature of the Indian village industry was that many of the artisans were servants of the village as a whole. They got payments in kind at the time of harvest from every agriculturist and were in turn bound to serve the village as a whole, throughout the year. The share of these village servants who governed by tradition and varied between 1% and 3% of the agriculturist's produce according to the importance of the craft. From village to village, the number of types of craftsmen included in this class of village-servants varied; but in all cases, the weaver stood above the group and received payment for his goods specifically.

Characteristics of Town Industry

The town industry was more specialised, better organised and more skilled than the village industry. The towns themselves offered a bigger market for the crafts. The nearby village people also used to come

to the town especially on market day. There were better communications and trade facilities between the towns. Though with difficulty, goods could, therefore, be sent from town to town and also to foreign countries. The towns often were places of pilgrimages, fairs and road-centres. They were also seats of local governments of noblemen and Chieftains. The clientele of the town crafts, therefore, was richer and more likely to encourage manufacture of skilled, though costly, higher skilled goods.

(i) Higher Skill

The town industry, being bigger, offered scope for division of labour and specialization. It was, therefore, more skilled. The standard of craftsmanship achieved was certainly commendable. The woollen goods of English towns like Kent, Essex, Yorkshire, Norfolk etc. were famed even in Europe. The Sheffield cutlery in England and Siegerland cutlery in Germany enjoyed a similar reputation. The Indian towns had developed a high standard in textiles. The muslin of Dacca had no rival to its fineness. As one Englishman put it, it was more a shadow of commodity than a tangible commodity itself. A piece of the finest muslin of one yard's width could be made to pass through a finger ring. The standard achieved in many Indian and foreign towns in pottery, stone carving, embroidery etc. could have compared creditably with any similar work done these days with the help of machinery and scientific knowledge.

(ii) Specialisation

The towns, like the villages, used to have a full complement of crafts, inspite of their specialization in certain lines. It must be remembered that trade though possible, was not easy and the town could not have depended entirely upon outside supplies of any goods. It was natural, therefore, that every town produced all types of goods for itself and for

the neighbouring localities. Only after this basic condition was satisfied, the towns could build up any special industry, in which they had an advantage in raw materials, traditional skill or the market demand. Thus specialization led to some sort of localization of crafts. In England, though woollen industry was carried on in all parts of the country to a certain extent, it was localized in the counties of Kent, Surrey, Essex, Suffolk, Yorkshire and the South Western counties. Mining and smelting of iron was localized in Yorkshire, Warwickshire, Sussex etc. Sheffield and Birmingham were famous for cutlery and other iron and steel articles. In the old Germany, in the wooded valleys of Switzerland there stretched endless series of little metal working establishments. In India, Dacca, Krishnagar and Chunderee were famous for finest muslins and calicoes. Lucknow specialized in chintz, Ahmedabad in dhoties and dopattas, Madura in palampore industry, Kashmir in shawls; Benares, Nasik, Hyderabad in brass and copper wares; the towns of Rajaputana in enamelled jewellery and stone-carving; Mysore in iron and steel production—to mention only a few names.

(iii) The Gild System In Western Countries

The town craftsmen usually organised themselves in guilds—trade organisations—with the consent of the Government. It was natural that members of the same craft should come together to solve their common difficulties and guard their common interest. They had to see that their trade was not flooded by unrestricted new comers and that their earnings were decent. They had to see that the fair name of their craft in their town was not spoilt by any deception practiced on consumers. The Government too, and in general the society liked the formation of craft guilds if that insured honesty of the craft. The government and urban authorities, therefore, encouraged

and sometime even insisted on the formation of craft guilds in the towns.

The guilds had wardens or officials at the top, either elected by the members of the guild or appointed by the mayor of the town. The guild formed rules of business, decided standards of quality and workmanship and often fixed prices. The guild officers were to inspect and see that the rules of the guild were not flouted by any member, and that the quality of the product was maintained. The guilds being cooperative organisations for the benefit of all, members did not compete with and under bid each other. Prices of goods were determined in a sort of monopolistic fashion by the guild; but the monopolistic power was not abused to the detriment of all society. Moreover, the town and government authorities were always there to override the guild, in case its activities tended to be anti-social.

As the guilds were responsible for the quality of the product, they were naturally given certain monopolistic powers. Membership of a guild was compulsory for any craftsman of the line. Without the qualification of membership nobody was competent to ply the craft within the borders of the town. The entry of new comers was to be only according to the rules framed by the guild, but was generally open to all classes of people. Usually, a young new comer had to serve a certain period of about seven years in apprenticeship in the craft under the guidance of a master-craftsman in the industry. The conditions of apprenticeship were calculated to train up the student well in the craft and befit him to carry on the high traditions of the guild. Members of the guild, besides being good craftsmen, had to be good citizens worthy of their tradition. And hence the master craftsman had to coach the apprentice not only in workmanship but also to rear him up in sound religious faith and morality.

craftsmen and employers themselves in the immediate future.

The above mentioned is the basic pattern of the gild system that obtained in all the European countries, though very naturally there were variations in different parts and at different times. The above description applies largely to the gilds in their hey days.

In India, we do find a similar organisation of craftsmen belonging to a craft. But the distinctive feature of gilds in India, at least in the Hindu section of the society, was that craftsmen of a particular craft formed a caste with all its social distinctions. The caste of a person was determined by his birth in a family belonging to a caste. Any craft was open to the member of an appropriate caste only. Persons born in other castes were not competent to encroach on the field. The caste thus preserved a craft only for its members. And as there were as many castes as crafts and even more, the whole society as well as the industries were divided into water-tight compartments, particular crafts going with particular castes.

The caste did for its members all that the gild did for its members. But there were certain points of difference. In the first place entry in to the gilds was open to all subject to certain conditions, while entry to a caste was only through birth. Men belonging to other castes were thus excluded from the particular craft or crafts of the caste. Secondly, the gild derived its power from a political authority like the Crown or the feudal lord. The caste on the other hand had religious and social sanction, which the political authority dared not question. Thirdly, the gilds had jurisdiction only for the town. Beyond its borders, anybody was free to ply the trade. The caste, on the other hand, extended to the whole of society and obtained both in towns and villages.

Fourthly, guilds were only local bodies. Craftsmen plying the same crafts in different towns formed and belonged to different guilds. The caste, however, had a wider significance. Craftsmen plying the same craft in different localities belonged to the same caste.

(iv) State Control

Over and above the guilds, which were local organisations, there was the superseding state authority. It is, of course, true that the control of the central government could not be as effective as it is today owing among other factors to the lack of easy means of communication and transport, and the necessary delegation of power to local organisations like town authorities, lords of the manors etc. Yet behind all these local authorities there did stand the superior authority of the State, which sometimes chose to regulate industry.

In the Middle Ages, ordinarily in all countries, local chieftans issued their own currencies and the confusion of currencies that ensued hampered trade and industry. In England, however, the State had brought about uniformity of coinage since the Norman conquest. Uniformity of weights and measures too was attempted as early as the fourteenth century. The wages also came in for state regulation. The first statute of labourers was passed in 1351. In 1388, Justices of Peace—special officers of the Crown—were given authority to fix wage rates in their districts. Acts were passed also to regulate the authority of guilds, requiring them to submit to the J. Ps. their rules and ordinances for approval. Sometimes the guilds saw that crafts were slipping from their hands, as their jurisdiction did not extend beyond the limits of the towns. The state could be approached and be persuaded to pass Acts extending the authority of particular guilds even to the neighbouring villages. Acts were passed regulating even particular indus-

tries. Upto the Industrial Revolution, in England, not less than 300 laws were passed regulating every aspect of the woollen industry. When it was feared in Elizabethan times that smelting of iron with charcoal would lead to deforestation and endanger the country's supply of wood for shipping, Acts were passed, restricting the number of iron-smelting works in particular localities. Gilds, moreover, often approached the State for protection from foreign competition and the State authority sometimes did provide the necessary help. In England the woollen industry was threatened by the imports of Indian cotton textiles, at the end of the 17th century, and Parliament passed an Act in 1700 prohibiting the import.

As a piece of industrial legislation, the Statute of Artificers passed in England in 1563 claims special attention. The statute was a comprehensive measure, covering various aspects of the labour problem, like employment, apprenticeship, training, wages etc. (a) It was enacted so that all able bodied persons between the age of 16 to 60, were liable to agricultural labour unless they had some property or were engaged in certain specified occupations. This was probably meant to rope in 'vagabonds'—men wandering without jobs—for some type of work. (b) The statute sought to ensure continuity of employment by ordering that, hirings, for agriculture or for any other occupations should be for not less than a year. (c) To ensure proper training for craftsmen, apprenticeship for a term of seven years was made compulsory for all in all parts of the country, including the villages. The trained apprentice, moreover, was not to set up independently unless he was twenty-four years old. (d) Entry to certain crafts was sought to be made possible only for men having some minimum land. (e) Wages in every part for every industry were to be determined from time to time by the Justices of Peace.

The statute was quite successful and was opera-

tive until the policy of the State was changed in the 18th century with the rise of Laissez-Fair philosophy. Only in 1813, the provisions regarding the wage-assessment were repealed and in 1814, compulsory apprenticeship was prescribed. Similar action was taken by the governments of other countries in Europe.

Conclusion

For the purposes of the comparison of the old industry with the modern industry, certain features of the former may be stressed at this stage. In all old crafts, the artisan was an independent businessman, plying the craft at his own risk. He owned the tools he used, supplied himself the labour required, purchased his own rawmaterials and himself marketed the product. He was thus a capitalist, labourer and an entrepreneur rolled into one. There was, therefore, no question of an industrial labour being exploited by a capitalist employer.

Secondly, the craftsman worked at his own place and at his leisure. His other family members also helped him in his work. The modern factory system with its discipline and requiring the labourer to leave his home for a separate place of work was absent.

Thirdly, it must be noted that though the quality of work in towns was quite good, the volume and variety of goods produced were limited. The old production does not stand comparison to the modern varied and prodigious production enabled by the use of machinery.

Fourthly, craftsman's freedom and independence may be contrasted with the plight of the modern factory worker. Thanks to his relative freedom, the old craftsman was far dignified a person than the present factory worker. It is, however, difficult to talk with certainty whether the conditions of work and standard of living were better for the old craftsman than they

are for the factory worker. Many critics of the present factory system have no doubt tried to depict the old conditions as almost idyllic. But there is the other side too. Often times, the craftsman's kitchen, living room and the workshop were one and the same room, with consequent dirt and congestion. He was probably required to work even longer hours than the present factory workers. His earnings were bound to be petty, as the general standard of living itself was low. His children too had to work with him. It is possible therefore that as a Wag puts it, "the craftsman's dwelling was a cottage for poetry and a hovel for history."

The Evolution of Old Industry Before Industrial Revolution

If we look upon the old industry of all the major countries as a whole, we find that there were two main types of forces which changed its nature and transformed it into the new form of modern industry. Some of these forces were out of the transformation of surrounding things; and change in the old industry was in the nature of a response to the change in these surroundings. This change may be called evolutionary. The other type of forces bringing the change in the old industry did not arise out of the immediate surroundings, but came in with a sudden impact from outside. The change in the old industry in England was of the former type, and that in the Indian industry may be said to be of the latter type. While the British merchants landed here, our old industry was still stable in its shoes, it was still running in the same old grooves. But for the foreign forces, it might have possibly remained in the same state. At least it is true that when the British came to this land, the native industry shared little signs of undergoing transformation on its own account. But along with the British merchants came the foreign cheap goods, and the establishment of the British rule meant the downfall of old nobility

who had patronised the old industry. New forces in the nature of railways, machine-production, imperialism etc. were also brought in by the British. And it is these which transformed the old Indian industry. Thus it will be seen that the change in old industry in India did not come about by way of a slow adjustment to gradually changing native surroundings but rather as a result of foreign forces which impinged upon the Indian economy from outside.

The Industrial Revolution started first in England for reasons explained later. It was natural, therefore, that the change in the old English industry should be of evolutionary character. There was not then any powerful force in existence in other countries which could have brought about a sudden transformation in English industry. It is, therefore, in old English industry that we can see how the old system underwent a gradual transformation, in response to changes in the immediate surroundings of the industry. It is necessary to study this slow change, because it is that which ultimately took the shape of the sudden and spectacular transformation called the Industrial Revolution.

In old England, the spinning and weaving of wool was easily the foremost industry, because of its existence in nearly all parts of the country, of its intimate connection with agriculture, and of the age and strength of its tradition. Says Wantaux "From time immemorial England, a country of pasture, has bred sheep and produced wool (for its industry). Wholly English in raw material and in labour, it asked nothing from outside world except the market and was a lucrative source of gold and silver flowing to England. It was the staple trade of England, and the people and Parliament had bestowed so much attention to it that people had written innumerable books and pamphlets about every aspect of the woollen industry and Parliament

had put more than 300 laws on the Statute Book. The woollen industry before Industrial Revolution had its historians and even poets. 'The woolsack, which in front of the Royal dais, and beneath the gilded ceiling of the House of Lords, serves as a seat to the Chancellor of England, is not an empty symbol.'

This great woollen industry of England was undergoing transformation before the I. R. Changes here were striking, because the industry was the most important. In the 'natural' or primitive state, wool spinning and weaving were carried on by farmers and weavers independently in their homes. The farmer spun and sometimes even wove the cloth for home consumption. Otherwise, weaving became the specialised job of a weaver who bought yarn, made it into cloth and himself sold in the local or nearby market. The weaver thus was self-sufficient, provided his own labour, purchased his raw material, owned his tools and managed to sell the product himself.

When due to expansion of international trade, the market for woollen goods expanded and production rose gradually, changes became necessary in the organisation of the industry. If goods were to be sold in large quantities and even sent to foreign countries, the intermediary agency of a merchant was needed. Besides, if production was to be on a larger scale, the weaver had not enough money to purchase yarn in larger quantities. He, therefore, needed some financial help, and this naturally came from the merchant, who on his own behalf, was interested in the weaver's greater production. But instead of lending capital in money form the merchant began to purchase yarn himself and hand it over to the weaver for weaving. This system was more convenient to the merchant because it assured him of the supply of woollen cloth. The weaver, however, lost in this transformation, the ownership of the raw materials and the function of

selling the cloth. He still owned his tools, and worked at his place; but his earlier self-sufficient position was gone. The system at this stage could be called 'the putting-out system', or the domestic system as the merchant put out his raw materials with weavers to be worked up in finished goods.

In the 'putting-out' system, the weaver became a wage-earner, because the risk in selling was now on the merchant. The weaver obviously worked for a stipulated payment, though this could not be strictly called reward only for labour. He still owned the tools. The merchant, however already appeared as a capitalist, because it was his capital in terms of raw materials that the weaver worked on.

Gradually, however, the weaver lost control on his tools too. In times of difficulties he had to borrow and the easily accessible moneylender was the merchant himself. Money was lent on the security of tools because that was the only thing which the weaver could easily mortgage. The tools of poor weavers, this way passed in to the hands of capitalist merchants and the weavers were reduced to the position of mere workers, who worked on somebody else's raw materials with the help of somebody else's tools. Besides the merchants also saw to it that instead of going to the independent weaver working on his own tools, they could as well install their own looms in a shed and make the weavers work on them. Such a course was more advantageous because the weavers could also be supervised while working.

The merchant capitalist, when he owned the tools, ceased to be a mere merchant. He became the industrial capitalist, employing weavers to contribute their labour in venture for stipulated wages.

The spinning industry too underwent a similar change, because the merchant wanted yarn for giving it to the weavers and it was most natural that he should

buy raw wool himself and 'put it out' for spinning. The spinners too thus became the mere wage earners.

Thus even before the I. R. startled England with spectacular results, the old English woollen industry had already undergone a transformation on the lines of capitalist production. This transformation is significant in relation to I. R. because the transformation came out of the same forces of commerce which rushed ahead and brought about the I. R. The genesis of the evolution of woollen industry and of the I. R. is therefore, the same.

It must be stressed, however, at this stage that the actual course of transformation was neither so smooth nor so logical as might appear in the above description. Regularity and uniformity are not the merits that can be claimed for the actual economic development at all times. Generalisations, therefore, are misleading and must be taken with caution. At any particular period, the woollen industry must have manifested itself as going through different stages of transformation at different centres, and it was also possible that various stages of the transformation were present simultaneously at any centre of industry.

Other industries remained more or less in their old State until, financial forces and mechanical and scientific inventions brought about a sudden transformation in them.

Side by side with the change in financial organisation of the industry in England, the gild system too marched slowly on the path of decay. When all the individual craftsmen were more or less on the same level of resources and produced independently for the local market, they could co-operate with each other and make a success of the gild organisation. Both the classes comprising the gild—masters and journeymen—shared in the prosperity and there was no antagonism in their interests. The capital required for the craft

had to sell their product to these richer fellows became veritable wage-earners themselves.

In England with the establishment of the strong Tudor rule, the gilds entered upon the period of their decline. The monarchy became strong and cherished the ambition of controlling the activities of all the nation. It was, therefore, not favourable to the local gild authority. As early as 1437, an Act of Parliament required gilds to submit their ordinances for approval to the J. Ps. Since then gradually, the gilds lost their authority. Finally in 1835 their privileges were formally abolished. The rise of new towns, free from gild restraints and the rise of new industries were further agents of the destruction of the gild's power.

CHAPTER VI

THE INDUSTRIAL REVOLUTION

What Is Industrial Revolution?

The term revolution is normally used to denote swift and momentous changes, transforming the character of any thing, in fundamental respects. A political revolution may involve a complete change in Government and in the political rights to the people, brought about swiftly and often violently, as in the French Revolution of 1789, or in the Russian Bolshevik Revolution in 1917. A social revolution may connote a basic change in the relationship of social classes and social institutions. Agricultural Revolution, in the economic field, implies a basic change in the organisation and technique of agriculture. Similarly then, Industrial Revolution may be taken to mean fundamental and swift changes in the organisation and technique of industry and in the relations of people concerned with industries.

Aspects

The contents of Industrial Revolution are too varied and complicated to be adequately described by any single formula. They have various aspects and all of them are of fundamental importance. On the technical side, the Revolution was based on the introduction of machinery driven by non-muscular power and on the discovery of useful chemical process. On the organisational side, it was marked among other things, by the predominant position of capital, the

factory system of production, large scale production units, extensive markets and intensive division of labour. On the social, side it may be noted that it produced wealth in unprecedented quantities and varieties. It helped the growth of population, demanded its concentration in cities, created the property-less wage earner and put him at the mercy of the capitalist. It divided the society into mutually opposed classes of capitalists and labourers, distributed the masses of wage earners into misery and poverty. On the political side, it fanned the flames of class-war which since its inception engulfed the nations internally and internationally. It has even changed the pattern of law. "The essence of Industrial Revolution", said Toynbee "is the substitution of competition for the mediaeval regulations which had previously controlled the production". There is thus, not one aspect of social, political and economic activity which the Industrial Revolution has not transformed completely.

Various writers, however, have been inclined to stress particular aspects of the change as being more fundamental than other; and hence constituting the essence of the Industrial Revolution. It has been suggested that the production for an extensive market, as opposed to the local market, can be regarded as a test of the new industry. In itself—the test is not impossible; and has the merit of throwing into relief the vital part played by the expanding commerce in the Industrial Revolution. Yet it cannot be accepted as the essential and unique feature of the Industrial Revolution. For even under the handicraft system, textile products of India had a wide international market. Similarly the carpets of Persia, certainly not the product of the Industrial Revolution, had an international market.

Secondly, it has been put forth that the system of

the distinctive feature of the Industrial Revolution. This view too, though it goes far enough to explain the nature of the new production is not adequate to describe the Industrial Revolution comprehensively. In the first place even on the technical sides, the Industrial Revolution did not only comprise of the use of the machinery. The production of iron was arrested by the scarcity of charcoal in the period before Industrial Revolution, and Industrial Revolution would not have proceed far if the difficulty had not been overcome by the use of coke. The substitution of coke for charcoal is, of course, not a mechanical invention, and yet it was of fundamental importance to the Industrial Revolution. Similarly the inventions of later chemical processes of turning iron ore with posphorous contents, into steel were equally important. Thus even on the technical side, Industrial Revolution can not be based only on the discovery and use of machinery. Moreover, machinery in all the real sense of the term, was in use, long before Industrial Revolution. The use of water-wheel was quite common. In Sussex iron works, hydraulic hammers were in use from the 16th century. Even the use of steam engine did not quite wait for Watt. Savery's engine, working on the power of steam, was in use in 1690: and a different model was invented by Newcomen in 1720. The use of machinery thus, did proceed the Industrial Revolution. Besides the significance of the Industrial Revolution cannot properly be appreciated by concentrating attention only on the technical side. There were other aspects of organisation, with the very important social and political consequences. Without the proper assessment of these, the momentous changes brought about by the Industrial Revolution can not be adequately sized.

Nor can the Industrial Revolution be characterised by fixing attention only on its social side. It is true that the modern wage earner, dependant entirely on the capitalist employer, bereft of freedom dignity and

prosperity, toiling and piling up enormous wealth only for others, and itching for a fight in desperation, with the employers, is a characteristic figure of the modern system of production. Yet, he too can not claim all our attention. As an economic event, the Industrial Revolution must be studied in more diverse aspects. The changes in organisation, technique, capital requirements etc., can not go unemphasised. Besides, the wage earner is not a unique product of the Industrial Revolution. As we have already seen, the merchant capitalist had already reduced the independent weaver to the position of a wage earner. Though working at his own place, the weaver, working on the raw materials provided by the merchant, and bound in contract to sell the product to the same merchant was indeed a wage earner. Going even beyond that, we find as already explained, that the guilds came to be dominated by a few rich guildsmen, capital requirements of the trade increased beyond the capacities of all journeymen wage earners and the old system where all journeymen could hope to become masters themselves disappeared. At that stage, the journeymen, doomed to service for ever, did constitute a wage-earning class with all its implications.

Proper Perspective

We find thus that an emphasis only on one aspect of the momentous changes called collectively Industrial Revolution distorts the picture and dims the vision. The Industrial Revolution is too complicated, varied and all pervasive to be described in a simple formula. It is, however, not difficult to place it in its proper place, if we take a long perspective of the development of economic activity of production. We can look upon the economic development as the progressive development of two fundamental forces—the exchange of commodities and the division of labour. At times, the field of exchange spreads itself out as under

the Commercial Revolution in the 16th and 17th centuries, and spurs development in division of labour. At others, the possibility of greater division of labour, created, for example, when a new specialised machine is invented, stimulates exchange of commodities on a wider scale. The two trends are related, because acceleration in one generates conditions of acceleration in another. And both together increase the volume and varieties of goods produced. The whole of the development of economic activity, therefore, can be looked upon as the development of these two trends. "The periods which are narrated in the history of economics" observes Mantoux "correspond to the more or less clearly defined stages of this double development. From this point of view, the use of machinery itself, important as are its consequences, is only a secondary phenomenon. Before it became one of the powerful causes in influencing modern societies, it began by being the resultant, and as it were the expression of these two phenomena, at one of the decisive moments in their evolution. This crisis, distinguished by the appearance of machinery, best defines "the Industrial Revolution."

No Accident

As pointed out above, every characteristic feature of the Industrial Revolution—whether use of machinery, factory production or emergence of wage earning class—projected itself well beyond the period that began in the latter half of the 18th century. It will be seen thus that the Industrial Revolution was not started by a sudden turn in the economic development. The cause that brought it about, namely, the development of exchange of commodities and of the division of labour—had been working for long; and only at a certain stage of their development, the appearance of machinery made the results more spectacular than formerly. It is necessary, therefore, to

emphasise that Industrial Revolution was no accident and that the economic development all along has been on quite consistent lines. We must guard ourselves against under estimating the significance of changes that proceeded the Industrial Revolution. An analysis of the forces that brought about the Industrial Revolution is made subsequently. It will further strengthen the thesis that the Industrial Revolution was in no sense an accident and that it was only a spectacular stage in a continuous evolutionary development of economic activity.

It may be asked then, 'if the Industrial Revolution was after all a step in the continuous evolution that was going on, why call it a revolution at all?' In the ordinary sense of word, revolution implies a sudden change. Is not Industrial Revolution then a misnomer? Strictly speaking the term Industrial Revolution is perhaps an unfortunate choice. Yet, for the historian, it conveys some real meaning which rightly deserves emphasis. True, it may be, that the change had begun earlier; but it still remains a fact that it was immensely accelerated only in the period characterised by Industrial Revolution. The results of Industrial Revolution, moreover, are too spectacular to be compared with those produced by the same forces earlier. Periods of history are after all artificial, in the sense that one continuous process of history is, for the sake of convenience, seen and studied bit by bit. Landmarks in history are thus convenient places for emphasis. Viewed thus, Industrial Revolution certainly begins a new epoch in economic history; and let the term, already impregnated with peculiar meaning by tradition be there to describe and emphasise the new epoch.

Section II.—Forces of the Industrial Revolution

The forces that brought about the Industrial Revolution, were in operation long before the Industrial Revolution became apparent. An analysis of these

forces will show how the Industrial Revolution was not an accident, but only the culmination of changes going on for centuries before.

Preparatory Forces

Some of these forces are negative in character. They changed the former conditions, which would have made the Industrial Revolution impossible. They thus prepared the ground for further positive changes. In the mediaeval economy, industry was bound down by gild restrictions. The gild was based on co-operation between members and eliminated competition by common control of quality, price and technique. The revolutionised industry was, however, to feed on competition of the individual's self-interest, and limitless urge for progress. The gild, therefore, had to go; and we have already noted how the power of the gild decayed, due mainly to the growth of trade.

Secondly, the agricultural revolution had necessarily to precede the industrial revolution. The old agriculture bound the rural population to land. If the bond had persisted, the new industry might not have got enough labour, in its factories. Moreover, the old agriculture did not produce a surplus, which could later feed a large industrial population. The agricultural revolution snapped the bond that tied the rural population to the land and thus afforded the migration to population to the new industrial areas. It increased the productivity of land immensely and enabled it to feed the big town population that was rising. It is not without significance that in England, the Agricultural Revolution had commenced in the 16th century and was well ahead by the time the Industrial Revolution started in the latter half of the 18th century. In Germany, Agricultural Revolution had been almost completed by 1870, when the Industrial Revolution began. In Russia, agricultural revolution was brought about

before the 20th century and Industrial Revolution could begin only after.

Thirdly, the rise of the national state must be counted. The development of trade and industry might have been seriously arrested by the restrictions imposed upon it by the feudal lord, the merchant and craft guilds and the Church. Supported by the financial help of the new merchant class. The kings levelled down all feudal lords and guilds and made the nations internally free for the development of trade and industry. The establishment of empires helped the development in the international field.

Fourthly, the Revolution dealt the death blow to the secular, political and economic power of the Church. The Church lands were confiscated and the economic restrictions which the Church imposed upon trade and industry within its territory, were done away with. The Reformation also helped the relaxation of the religious hold on the economic activity of the people. The old Church had placed the ideal of asceticism before the people. But Reformation afforded religious salvation even to those who were partaking in the normal pleasures of life. Gradually the individual's unlimited pursuit of wealth became free from the stigma of religion.

The above forces prepared the ground for the free play of certain positive forces. The Commercial Revolution, described elsewhere, was the most potent of the forces. It expanded the markets and made way clear for large-scale production. It accumulated capital—capital, which alone could later finance large-scale production. The import of precious metals from new continents of the Americas, was a further contributory force. But for the imports, prices of commodities might not have risen, and given that spurt to trade and industry which alone later made large-scale machines production feasible.

The development of transport was closely connected with that of trade. The revolutionised large-scale industry required cheap and large-scale transport of raw materials from their distant sources to the place of the factory, and of the finished goods from the factory, to very wide markets. Without the development of transport, therefore, on land and water, the development of large-scale industry and consequently the birth of the Industrial Revolution were impossible. It must be remembered that England, the cradle of the Industrial Revolution, was well served by easy water-transport facilities and that the economic development of Russia, Germany and India was arrested for want of the same. In Germany, the U.S.A. and India, the development of industry had to await the construction of railways, in the 2nd and 3rd quarters of the 19th century.

Thirdly, there were the mechanical and chemical inventions. They changed the entire appearance of the industry. They accelerated production by introducing machinery and new techniques. They made hosts of new things possible; increased the precision and accuracy of workmanship; took over much of the strenuous work from off the human shoulders, and in general helped to create mass production and opulence.

Fourthly, the growth of population must be counted as a helpful force. It provided an expanding market for the ever increasing goods and also an increasing supply of labour to the industry. The English population increased from 9 million in 1801 to 36 million by 1901. In 1790, the U.S.A. population was barely 4 million. It increased to 31 million in 1860 and to 122 million by 1930. It will be noted that the period of the growth of population coincided with that of the Industrial Revolution in each country.

Political factors too have played a big role in facilitating the Industrial Revolution. We have already

noted how the rise of the National State wiped out all internal barriers for the development of trade and industry. Further the establishment of empires and colonies was of immense help. The colonies and conquered territories could be developed as sources of raw materials and the market for manufactured goods, by a deliberate State policy. The national States could further help their industries by granting tariff protection and subsidies. The Industrial Revolution in Germany, the U.S.A. and Japan have been hatched by the State, behind their tariff walls. In India, on the other hand, the lack of tariff protection by the State till the War of 1914-18, hampered the rise of Indian industries. The Japanese State was not content by granting only protection. It went a step further and itself started new industries with the help of foreign technical skill and capital.

In some colonies and conquered territories, the foreign enterprise, technical skill and capital were responsible for starting the country on the path of Industrial Revolution. India is a notable example in this respect. The plantation industries, the coal industry, jute industry and the railways were the first to develop in India and all of them were nursed by the foreigner with his own equipment

War too must be mentioned as a distinct force which has accelerated or retarded the Industrial Revolution in every country. The Napoleonic Wars impeded the industrial development on the devastated continent of Europe, and yet, stimulated the same in England. The German Industrial Revolution benefitted from the Franco-Prussian war of 1871. The Civil war in the U.S.A. accelerated its industrial development. The Japanese Industrial Revolution too, thrived on the Russo-Japanese war of 1904. In India also, it was the American Civil War which helped the commercialization of cotton cultivation; and the two world

wars gave distinct phillip to general industrial development. War thus has been much helpful for the industrial development of nations. It raises the demand for industrial goods in general, and in particular, necessitates and brings about the development of basic industries like iron and steel, engineering, machinery, chemicals etc. It stimulates the development of transport of all kinds. It brings in inflation and through it, feeds a general boom in prices, profits and production. In a dependent country, it presses for the change in the foreign ruler's policy of checking the industrial growth of the country. A successful war brings in an indemnity and wins colonies and dependencies which can be exploited as sources of raw-materials and markets for manufactured goods. An unsuccessful war affects adversely. It is to be also noted that the modern wars have been progressively more destructive; and as such they are likely to affect both the parties adversely.

It will be seen that the preparatory forces and the forces of Commercial and Transport Revolution were working in the later Middle Ages, long before the Industrial Revolution was first apparent in England. The Industrial Revolution, which was the result of these forces, was thus not accidental or sudden. It was long in the offing.

CHAPTER VII

INDUSTRIAL REVOLUTION IN DIFFERENT COUNTRIES

The Industrial Revolution having commenced in one country affected other countries too. It started first in England, and made the production of goods more abundant and cheaper. The English goods, so produced, were exported in exchange of raw materials of other countries. In effect, the trade of other countries was bound to increase. The development of transport in other countries got stimulated; and a commercial development was fostered. The development of commerce in its turn, created conditions suitable for the Industrial Revolutions in these countries. Besides, once the advantages of factory production were known, and once the knowledge of the machinery and the technique of organisation was available, other countries too were bound to foster a rapid development of industries on new lines. That is what actually happened in countries like Germany, Russia, Japan and the U.S.A. Moreover, the Industrial Revolution, though essentially economic and social in character, had a political fringe also. It increased the country's potential for war. It was natural, therefore, that in the race for national glory and aggrandisement, every nation should try to bring about an Industrial Revolution, for itself.

Earliest in England

The Industrial Revolution started first in England in the third quarter of the 18th century; and through-

out the 19th century; England led all other nations in industrial progress. In Germany, the Industrial Revolution could start only in the fourth quarter of the 19th century, i.e. about a century after in England. Russia had to wait almost upto the 20th century. In the U.S.A., though industries were developing before the Civil War of 1860-64, the Industrial Revolution really became apparent only after that. In Japan, the new industry was developed after 1868 when the economy of the country was thoroughly overhauled. In India, the industrial development on new lines started in the latter half of the 19th century; but the development hardly assumed the character of a Revolution until the first World War.

The fact that the Industrial Revolution started first in England is significant. It is not an accident of history. There are certain cogent reasons, which fully explain the pioneering role of England. As has been explained earlier, the Industrial Revolution was the culmination of certain economic forces, which were working right from the 15th century. It was natural, therefore, the Industrial Revolution should be brought about first in that country which was leading in the development of those forces.

Economic Factors

The Commercial Revolution was the primary condition of the industrial development. And we find England abreast of all nations in commercial development. She had a very convenient geographical position at the threshold of the Atlantic. Her island character and excellent harbours were extremely favourable for maritime trade. She had a sea-faring population, and rich natural resources for the growth of ship-building. She produced wool which had an international market. She established colonies which increased her international trade. She built up trad-

ductivity of agriculture and enabled a surplus which could sustain a growing industrial population.

England was well served by transport facilities. Most of her parts were accessible by sea, and she had excellent harbours all along her coast. Her rivers too were suitable for navigation, and canals could be easily dug to supplement the natural water-transport facilities.

The frame-work of the new industry was to be supplied by iron and steel. And it was inevitable that only those countries, which could boast of rich and conveniently placed deposits of iron and coal should be able to go ahead with the Industrial Revolution. England was well endowed by Nature, in these respects. Her coal and iron were conveniently placed. Easy water-transport was available to bring the two together. English coal was good coking coal too. Otherwise, it would not have been useful for iron-smelting according to the early methods. English iron ore, further, was free from phosphorus contents and hence suitable for steel making. The German industrial development was delayed because the German iron-ore was not of suitable quality, and French industrial development was for ever restricted by lack of adequate coal.

We must also pay due tribute to the inventive genius of the English. Between 1760 and 1850, Englishmen accomplished epoch-making inventions in textiles, iron and steel, transport, machinery etc. They led the world in the application of science to industrial progress.

Political Factors

The above are the economic factors, which were working in England earlier and more effectively than in other countries. They thus made England ripe for

the Industrial Revolution earlier than any other country. Yet there were certain political factors which really confirmed England in its pioneering role. During the 16th, 17th and 18th centuries, England overpowered her rivals—Spain, Portugal, Holland and France, one by one. She destroyed their navies on the high seas and defeated their armies on foreign lands. She thus assured for herself the monopoly of the extremely lucrative trade, resources and markets of America, India and the Eastern countries. England, further, was an island, a fact which gave her immunity from the ravages of wars which were afflicting all the continental countries. Throughout the period of the economic transition, no war was fought on English soil; and her trade and industry enjoyed that continued spell of peace and tranquility which made for their uninterrupted progress. The other continental countries lacked these and their energies were wasted on political struggles, at the critical times of the birth of the Industrial Revolution. From 1789, France was engulfed in a Revolution and its aftermath. Germany was the cock-pit of European wars. Holland and Belgium were enterprising, but were small and got crushed between their warring neighbours. In England, further, individual freedom had attained a very high level and inspired free individual enterprise, which was most helpful in early stages of industrial capitalism. In England, again, the democratic form of polity had given prominence to the rising merchant and industrialist class; and the state policy could be easily shaped to suit the needs of the rising industry.

The above factors explain fully why, of all countries, the Industrial Revolution started first in England, and why its tempo was the highest there. An examination of particular circumstances in other leading countries will further substantiate the explanation.

In Other Foreign Countries

France

France, indeed, was a mighty nation; and so long as economic prosperity depended mainly upon land and population, France towered over all European nations on the strength of her fertile and immense land and big population. But the Industrial Revolution turned the tables, land and population alone were no longer sufficient. New factors like commerce, capital, markets, coal and iron had stepped up in importance. France unfortunately lacked many of these. In the first place, she was not free from restrictions of the feudal system, until the system was thrown over by a bloody Revolution in 1789. After the revolution, she undertook to impose the cult of liberty, fraternity and equality—on its unwilling neighbours and thus courted exhausting wars for over a quarter of a century. Her wealth, resources and energy were thus largely wasted, at a time when England was rushing ahead with her new methods of production. Ultimately, France lost the war too and became powerless to successfully wrestle from England the markets and resources of colonies and conquered countries of the East. Moreover, even when later she gathered her strength and was ready to go ahead with the new economy, she was seriously handicapped by scarcity of coal. She had some iron deposits but had no suitable coal; and her industrial structure has forever remained weaker for that.

Germany

Germany, until the formation of the Empire in 1871, was divided and ruled over by many small Princes. In the 18th century there were about 300 Princes, who had their own separate tariffs and currencies. It was impossible, therefore, that trade should be flourishing while making its weary way through

tariff barriers and currency confusion. After 1815, the number of States was reduced to 38. Yet even this number was enough to stifle trade successfully. It was only after the rise and growth of the Zollverein from 1834 onwards, that Germany was united for trade purposes and internal tariffs were abolished. The old feudal restrictions too were present in Germany right down to the middle of the 19th century. Emancipation of the serfs began only in the 19th century and was not completed even by 1850. The power of guilds too remained undisturbed till the middle of the 19th century. Germany, moreover, has always been a nation in arms. Due to her geographical position, she has been the battle ground for most of the major European wars; and wars were not fought without inflicting ruin on German agriculture and industry. Under these conditions, it was impossible that Industrial Revolution should have started in Germany until after the middle of the 19th century. But once the barriers were removed and pre-requisites met, Industrial Revolution commenced and developed in Germany at an astonishing speed. By 1871, Serfdom was abolished, guilds were shorn of their controlling powers. Commercial unity was established; transport development had begun and Germany was ready to go march shoulder to shoulder with other big European powers.

Once started its career, the industrial development gathered momentum rapidly. Germany had all the requisites for it. She had ample resources of coal, iron and chemicals. Iron smelting was her age long heritage in Siegerland, her knowledge in chemistry had always been superior to that of all other countries. Her labour was skilled, industrious and efficient. Long traditions of militarist creed had made it disciplined. The Government took special interest and offered help in all possible ways. Liberal protection was afforded to industries from 1877. Research institutes like the "Gewerbe Institute" were started, and

education was imparted through schools and colleges. Monopolistic combines of producers were encouraged, if they were found to offer prospects of increasing efficiency in production. The thorough-going, painstaking, intelligent character of the German people too was a big contributing factor. It was no wonder, therefore, that by 1910, Germany surpassed all continental countries in respect of every industrial product and challenged the supremacy even of England. In 1913, her coal and lignite production was 179 million metric tons as against England's 292 million metric tons and France's 40.8 million tons. Her pig-iron production was 147 million metric tons against Britain's 10 and France's 4. In electricity and chemicals, she surpassed every other country and built up huge foreign trade. Her shipping tonnage increased from 1 million to 2.39 million by 1913, as against the British Commonwealth's 11.3 million tons.

U. S. A.

As for the U. S. A., it was still a infant nation when Industrial Revolution started in England. Before the war of Independence in 1761-65. England's colonial policy had, stifled her industrial progress. England did not want American industries to grow and compete with home industries. The English colonial policy, therefore, was directed towards building up the colonies, only as sources of raw materials for the home industries, and markets for the manufactured goods. It was impossible, therefore, that there should be any considerable growth of American industries in her colonial period. But even after she broke away from England, she could not proceed with industrial development for nearly a century. Being young she had not the capital necessary for large-scale industries. Her transport system had not yet grown. Even the territory was not settled. People had not come to stay permanently

at their places. They were still moving westwards in search of new virgin land. Population was not enough to exploit the available resources fully. Whatever capital was available, was needed for commerce and transport development; as it was natural that commercial development should proceed industrial development. Besides, people were not yet thinking in terms of industries at all. Immense fertile lands stretched before their eyes, and seemed limitless even beyond the horizon. Any enterprising spirit, therefore, had full scope in the most primary of civilized activities—agriculture.

It was natural, therefore, that the U.S.A. had to go through a preparatory period before launching on industrial development at full speed. By 1864, all preparations were complete. Population had increased. Agricultural land did seem after all limited and people turned to industry. Capital had been accumulated. The Civil war had given stimulus to the industries. Transport development had progressed enough. The country was now served by roads, waterways and railways. Protection was granted liberally by the State. Besides, Nature was especially generous in putting all industrial raw materials in plenty at the disposal of the Americans. The Americans on their part were intelligent and enterprising people. The combined effect was that the Industrial Revolution once started, proceeded with astonishing speed. Before the end of century America became one of the foremost industrialised nations of the world. In fact, she overtook England in the production of pig-iron and steel in 1890, in the output of coal in 1899 and in that of cotton goods in 1900. The number of wage earners in 1857 was 1.3 million; but by 1919 it rose to 8.9 million. During the same period her capital increased from about 1000 million dollars to 44,400 million dollars and the value of her annual products increased from 1886 million dollars to 62,418 million dollars.

Japan

Uptil 1868, Japan remained insulated from any outside contact. She had not given up the feudal method of life until the Meiji Restoration in 1868 i.e., about hundred years after the Industrial Revolution had started in England. But once started on its modern career, she took to industrial development very keenly and enthusiastically. The Government itself gave a good start by starting industries on its own account. Foreign capital and skill were imported, and training was given to the people in the new methods of production. The Government's industries were after some period handed over to private enterprise, when it felt strong enough to undertake them. But at all times the Government's help, through tariff protection, subsidies, capital provision, tax remission and other concessions was always forthcoming. The qualities and character of Japanese people too, stood them in good stand. Japanese labour was skilled even in feudal times, and retained that skill, with suitable adaptation even through the course of the new industry. It was well disciplined, content to follow the lead of employers and prepared to work on low wages. The cheapness of labour, therefore, was a special advantage enjoyed by the Japanese industry and was very helpful in the competition with Western goods. Nature too was not niggardly. She gave Japan a favourable Geographical situation, rapidly growing population and enough iron and hydro-electric power.

INDUSTRIAL REVOLUTION IN INDIA

Earlier Industrial Conditions

In India, the industrial progress had come more or less to a standstill, on the eve of the advent of the British. Most of the population lived in villages and was served by the village artisans, means of com-

munication and transport were extremely scanty ; and the village for most purposes, was cut off from the rest of the country. Village trade was, therefore, bound to be negligible ; and the village industry had no incentive to progress. Even in towns, industrial progress had been halted, though of course, the level of skill and craftsmanship attained in certain industries was quite remarkable. The vast distances within the country—the bad condition of transport by roads or rivers, and their unsafe character were indeed great handicaps to trade. Political instability and insecurity were further obstacles. The caste-system, moreover, divided the different crafts into watertight compartments, and prevented any mobility of labour and capital. Old methods and old techniques had crystallised into creeds to be followed without question. The level of industrial production, in respect of quantity and quality, had adjusted itself to the low level of trade ; and a stalemate had been reached. Trade had ceased to expand ; and so had industry to progress. It is perhaps true to say, therefore, that under the prevailing circumstances, the Indian industry might not have developed on any revolutionary lines, had it not come into contact with revolutionised Western industry.

With the coming of the Western Powers in India, however, things began to move. Till the Industrial Revolution gave better advantage to the English industry, the Western trade had not been unfavourable to India. The Indian goods compared well with Western goods, and were in great demand in the West. The Indian calicoes became very popular in England. The Indian shawls and carpets became fashionable in France. Other goods too captured the Western markets. But with the coming of the Industrial Revolution in England, and the establishment of British rule in India, the scales were turned against India. And the Indian industries decayed.

Decay of Indian Handicrafts

The specific reasons of the decay of Indian handicrafts are as follows. In the first place, the Indian hand-made products could not stand the competition of foreign machine-made goods. The Indian textile industry, iron and steel industry, ship-building industry, etc. lost ground one after another. The railways too helped the foreign goods. They opened out the interior of the country to foreign goods and exposed the Indian handicrafts to foreign competition. But for them, the cheap foreign goods might not have found access to the vast interior market of the country. Secondly, with the rout of Indian princes and noblemen and the disappearance of their courts, the highly skilled Indian crafts lost their old patronage. Thirdly, the new bureaucracy, the rising merchant class and the newly educated intelligensia turned their back on the Indian crafts. The British introduced their own ways of living into the conquered country and the Indians opened their methods, as a mark of progress. Foreign goods, therefore, came into use; and the Indian goods lost their demand. Fourthly, the foreign demand for Indian goods tempted the Indian industry into deterioration. The foreign demand was for cheap goods, and for patterns and colours not agreeable to Indian workmanship. The Indian artisans, however, clung to it as the last resort and allowed themselves to be tempted to adulterate raw materials, to degrade craftsmanship, and to monkey with colours and patterns to the low taste of the foreigner. Lastly, the Indian industries suffered from the deliberately raising policy followed by the East India Company and the British Government. The Company often forbade weavers and artisans to trade with anybody, except themselves. They killed the ship-building industry by discontinuing the use of Indian ships for trading. They allowed the import of foreign manufactured goods almost free into India, while Indian manufac-

tured goods were charged about 80% duty in England. The British Parliament banned the import of Indian calicoes into England from 1700.

Rise of Modern Industry

The new Indian industry—the large-scale factory industry—was introduced and fostered under the auspices of the British rule. It was British capital and enterprise which developed India's tea and coffee plantations. The same agency initiated the coal industry and built up the whole jute-manufacturing industry of the Bengal. The British introduced the railways into India, with their enterprise, capital, and technical skill. They were actuated in this task, mainly by two motives. Firstly, railways were necessary for strengthening the hold of the British army on India. Secondly, railways were required to move Indian raw materials from the interior to the ports for shipment abroad; and to move British manufactured goods from the ports to the interior markets for sale. The railways, however, turned out to be useful for more than these two ways. They stimulated the internal commercial development of the country; and made it ripe for the introduction of modern large-scale industry of all types. The British enterprise, capital, skill and Government, thus laid the foundation of India's modern industrial structure.

The Indians too followed in the footsteps of their masters, though rather slowly. With commerce, capital accumulated and banking facilities developed. The Indians got initiated in modern methods of commerce, banking, financing, organisation and management of industries, new techniques etc. They imported foreign machinery and, if necessary, technical labour; and built up mainly the cotton textile industry, the coal industry and the iron and steel industry up to the first World War

Estimate of Industrialization

The industrialisation of the modern type started in India from the middle of the last century and by 1914, had a career of more than sixty years. But the achievement was disappointing, in respect of speed, comprehensiveness, balance and efficiency of industrialisation.

With more than sixty years of industrialisation, India in 1914, could boast of only about 7,000 factories, employing a little more than 2 million people. There were 265 cotton mills, employing about 3 lakhs of people; but the Indian textile industry was not supplying the whole of the Indian market. In finer counts it could not compete with the Manchester industry and in coarser counts, a large production by handlooms was necessary. The coal industry produced 16 million tons annually and employed about 1½ lakhs people. But the output was not sufficient for India's needs and vast quantities were imported. The iron and steel industry had only made a beginning from 1911 and was obviously in infancy. The only other developed industries were the tea plantations, employing 7 lakhs of people, coffee plantations, employing ½ lakh of people and jute manufacturing, employing about 2 lakhs of people. This was all the industrial record of India by 1914. If we compare it with the rapid industrialisation of Germany, Japan and the U. S. A., the slowness of India's progress at once becomes clear. Germany started industrialisation after 1870; but by 1914, she led all other nations in chemical and electrical industries and her coal and iron production was bigger than ever England's. Japan started industrialization after 1868, but by 1914 had a well-developed cotton textile industry, iron and steel industry, hydro-electric industry, machine industry, ship building industry and so on. In spite of industrialisation, the

percentage of urban population in India has remained only 10% throughout.

The lack of comprehensiveness of India's industrialisation is equally clear. In 1914, India had no iron and steel industry worth the name. She had no chemical, sugar, cement, paper, dyes and drugs industries. She was totally helpless in defense industry. She had no armaments and munition industries. Nor had she any advanced and complicated industries. Machinery and machine-tools, engineering, ship-building, automobiles, railway engines, radio and wireless, electricity etc. were all conspicuous by their total absence. The lack of comprehensiveness was reflected in the huge imports of manufactured goods and exports of raw materials.

There was further no balance in Indian industrialisation. The effort was concentrated only on consumption goods industries like textiles, tea and coffee. The basic industries like iron and steel, chemicals, engineering, transport etc. were totally neglected. Whatever Indian industries there were, were dependent upon imports of machinery, machine-tools and chemicals from foreign countries. Besides Indian industries were concentrated in particular places only. The main part of cotton textiles was confined to Bombay city and that of jute industry to Calcutta. Coal mining was concentrated in Bengal and Bihar. The geographical lay-out of industries was inequitable from the point of different provinces.

In efficiency also, Indian industries compared ill with other advanced industries. It depended upon imports of foreign machinery and could make any progress, only when the foreigner allowed it to have knowledge and equipment of better technical methods. Inevitably, therefore, the Indian industry could not be up-to-date in efficiency. It suffered also from lack of efficiency of the Indian labourer.

Reasons Of Slow And Lop-Sided Development

The reasons of this slow and lop-sided development are not far to seek. The industrial development, among other things, depends upon commercial development, capital accumulation and availability of suitable resources and power. In India, commercial development had not gone far enough, when industrialisation began. The roads and railways had made substantial progress ; but they were yet inadequate to integrate all villages of the country in one organic whole. The pace of commercial development thus checked the pace of industrial development. Capital too was obviously slow to accumulate. The foreigner supplied capital only to those industries, which seemed sufficiently profitable to him. Native capital was first invested in commerce, because commercial investment is easier, safer and more lucrative than industrial investment. Indian capital, besides, was shy. Unaccustomed to large-scale commerce and industry, people preferred hoarding of capital to its investment. Indian industrialisation also suffered from non-availability of power in suitable places. All our coal resources are concentrated in Bengal and Bihar only. Besides, our natural resources were not even known for a long time. The development of industries also depends upon an expanding and receiving market. In India, the masses of people are constituted mainly of agriculturists and hence the prosperity and development of industries must depend upon the demand of the agriculturists. But the unprofitable Indian agriculture has kept the agriculturists poor and has retarded the growth of industries.

Modern industry, further requires trained labour. But in India, labour is not even literate. The facilities for technical training were too inadequate in relation to the requirements of sound and rapid industrialisation. The Indian labourer is inefficient because of his

general poverty, his inadequate and defective diet, the exhausting hot climate, lack of medical facilities, miserable housing etc.

Moreover, the industrial development depends upon the Government's policy too; and the Indian industries had the bad luck of having to develop under non-sympathetic foreign rule. National Governments in independent countries like the U. S. A., Japan, and Germany, encouraged industrial development within their countries by giving tariff protection against foreign competition; by giving financial assistance through subsidies, tax-remissions, interest-guarantees, and capital-subscription, by arranging to import foreign capital, machinery, and technical skill; by providing for facilities of technical training and research etc. The Government of Japan went even further and itself started new industries, in the eighties of the last century, when private capital and enterprise were not forthcoming. *The British Government in India* did nothing of the sort. It failed to take any active measures for the promotion of the Indian industry. By its 'sins of omission', it was guilty of retarding India's industrial development.

CHAPTER VIII

FEATURES OF INDUSTRIALISM—ORGANISATIONAL

(1) The Factory System

Before machinery came to be used on a large scale, each artisan worked with his simple tools at his own house. If he employed any assistant, journeyman or apprentice, the latter stayed with the employer himself. Such assistants and apprentices were normally expected to set up themselves as independent artisans, in course of time. There was thus no sharp antagonism between the employers and the employees. To be an employee was just a passing stage in the career of a would-be employer. There was also no cleavage about the ownership of capital—tools—and labour. The artisan worker himself owned the tools; and labour. and looked to the purchasing of raw-materials and selling of the finished products. The Industrial Revolution, however, replaced this 'home system' with the factory system of production. Before the Industrial Revolution, the tools were simple and cheap. They could, therefore, be owned and worked by the artisans at their places. So long as machines also were simple, cheap and handy, they could be owned and worked by the artisans at their houses. The earlier 'fly shuttle' loom and the 'spinning Jenny' were important machines; but as they were simple and cheap they did not necessitate any change in the 'house system' of production. The Industrial Revolution, however, later developed machines which could be worked only by

steam or water power. These machines could not, therefore, be worked in the artisans houses. They had to be installed in specially constructed buildings, where water or steam power could be made available. Moreover, the machines became complicated and costly. They were now beyond the reach of the ordinary artisans. They could be owned only by rich persons. The rate of production of the machines also increased ; and any producers, producing with the help of machines, had to provide for large-scale purchasing of raw materials and large scale selling of the goods. All this required a good deal of money capital. The common artisan, therefore, found it beyond his capacity to own the new machines and arrange for production. He could not also stick to his old simple machines any longer, as they could not stand the competition with big machines. The old artisans, therefore, were required, by the 'whip of circumstances', to set aside their own tools and in order to earn a livelihood, to offer themselves as workers on big machines owned by the capitalists. The factory system thus implied a divorce between capital and labour i.e. the labourer was no longer himself the owner of capital he worked with. Moreover, as the capitalist employer paid him just enough for his subsistence, the worker had no hope of amassing money enough to set up his own factory. The worker, therefore, was doomed to be a worker forever, under the factory system. Thus, the factory system meant a threefold change from the home system of production ; work was carried away from the worker's house ; he was divested of ownership of the means of production ; and he was forever doomed to be only a wage-earner.

Besides these characteristics, the modern factory system has been marked by other features as well. The modern factory brings to our mind a building, in which the huge, intricate machines—overshadow everything else. The factory building is constructed

to suit the convenience of machines and not of men. The factory divides the workers into various sections, on the principle of division of labour. Particular labourers concentrate on doing the same part of the process of production ; but the whole thing is so organised that all divided labours fit in smoothly together. For purposes of this type of coordination, all the factory workers are required to obey certain rules of factory discipline, regarding the number of hours worked, the starting and closing time, the speed of work, the distribution of work and so on. The motive power that drives the machine is mostly steam or electricity, but in certain cases, water and wind too. Production is on a large scale ; and appropriately the purchasing of raw materials and the selling of factory products are done on a large scale.

The conditions of the factory work for the labourers were horrible, at least in the beginning. Men and machines were crowded together in small places for economy of space. No attention was paid to the arrangements of ventilation and light in the buildings. The heat and noise generated by the machines made work intolerable. Even dangerous machinery was not fenced and accidents were frequent. Hours of work for all including children and women were as long as sixteen hours a day. Child labour was ruthlessly employed to the maximum possible extent, and was treated with extreme cruelty. Women were employed in night hours also, with harm to their health and character. In short, the factory workers ceased to be reckoned as human beings, and the factory became a veritable house of misery.

(2) Tendency Towards Large Scale Production

The introduction of machinery on an increasing scale in every line of production normally tended to increase the scale of production. From the point of

productivity, the machine had very evident advantages over human labour, in that the machine could work with greater speed and accuracy, and with lesser cost and fatigue. Once, therefore, the market was ripe for introduction of machinery, there was a constant tendency to substitute machines for human beings, wherever possible. But the transfer of work from men to machines meant that the production technique be reduced to a series of mechanical operations. For the machine could perform and go on repeating only mechanical processes. Greater and greater use of machines, therefore, meant greater and greater division of the work into minute mechanical processes. This progressive division and processes, however, could not be achieved, without increasing the scale of production, if all the units of machinery, were to be kept constantly employed. The use of machinery, therefore, in general, tended to increase the scale of production of any unit establishment of productive organisation.

The use of steam power, too, helped this tendency towards large scale production. The steam power which could be generated most economically, was on such a scale as to be sufficient to provide, motive power to a large establishment of machinery. For the economic use of steam power, therefore, the scale of production tended to be larger. On the other hand, when later electric power became available for industrial purposes, it was found that it could be transmitted over distances, and could be economically used in even small scale establishments. The effect of electric power, therefore, was to reverse at least to a certain extent, the tendency towards bigger establishments of production. And it is interesting to speculate whether, if earlier than steam power electric power had been harnessed successfully in the beginning of the Industrial Revolution, the unit establishment of production would or would not have remained small. In Japan,

for example, electric power is easily and cheaply available in every nook and corner of the country; and there consequently, the small scale unit of production is dominant over the large-scale unit. Even in those countries, where steam has formerly built up large-scale units of production, there is a plea made to disperse production into smaller units of production, with the help of electric power.

Other points which make the larger scale more effective and preferable are (a) large-scale production enables large-scale purchasing of raw materials. This gives stronger bargaining power to the buyer and hence it is cheaper. It is also more economic for transport arrangements for further processing of the raw material etc.

(b) Large-scale selling arrangements also become more effective and relatively cheaper. Modern selling requires elaborate arrangements for advertisement of the goods through the press, posters, show-windows, cinemas, radios, books, pamphlets etc. Special canvassing agents have to be appointed. The market has to be carefully studied and if possible to be developed or newly created. For all these things, a large-scale production unit is better fitted with, than a small scale one, thanks to its financial strength and capacity to cater to a big market.

(c) In the production of most of the commodities, certain by-products too arise inevitably. In the cotton industry, for example, the cotton seed too becomes available, though not deliberately gone in for. Silver is got as a by-product in copper industry. In meat manufacturing industry, bones, hides, nails, glycerine, etc. are by-products. In sugar industry, the molasses arise as by-product, and are useful in producing power alcohol. Now, these by-products can be put to economic use, if they themselves become available in large quantity; and in

order that this should be so, the primary industry has to be on a very large scale. If the scale of production of the main industry is small, the by-products are too small to be made use of economically. The large-scale production, therefore, has the additional advantage that its by-products too can be made useful.

(d) In the competitive economy, each producer is always interested in improvising the quality of his product and reducing the cost of production, so that his market may be expanded and profit increased. And even if any producer would like not to bother about progress, he would still be compelled to do so, lest his competitor might steal a march over him. Continuous effort to improve quality and reduce cost i.e. research—is therefore necessary in competitive markets. The large-scale production unit is in a better position to bear the expenses of well organised research than a small scale one.

It is because of this competitive superiority of the large-scale production unit, that Marx prophesied the gradual squeezing out of the small-scale business by the large-scale one; and economic history partially substantiates what Marx said. The following table illustrates the growth of average capital, product and number of wage-earners in Industrial establishments, in America.

Year	Average capital	Average product	Average No. of wage earners.
1660	7190\$	13420\$	9.3
1900	19269\$	25418\$	10.4
1920	153293\$	215157\$	31.0

In 1925, about 5.6% of total establishments had more than 1 million dollars of capital each. They employed 56.8% of total wage earners and produced 67.6% total product.

In Britain, the factory was predominant in the textile, the metal and the mining industries by 1840 ; and in 1930 there were more than 127,000 factories, at least 25% of which employed more than 25 persons.

In Germany, too, the same movement was noticeable as seen in the following table :—

in Establishments employing,	percentage of workers.	
	1882	1907
10 workers	61%	36%
between 10 & 50 workers	13%	18%
50 workers	26%	46%

In 1909, there were 229 establishments having more than 10 million marks of capital each ; and the Krupp works at Essen alone employed 70,000 workers.

India, too, imported the factory form of industrial organisation from Western countries ; and starting from the middle of the 19th century, the form has been well developed in certain industries like cotton and Jute textiles, iron & steel, coal, cement, paper, sugar, tea etc. In 1911, 7113 factories were counted as employing more than 20 persons each and they employed in all more than 20 lakhs of people.

(3) Survival of Small-Scale Industries

The logic of the efficiency of production should really lead to the establishment of large-scale producing units everywhere ; and the general trend of economic development is unmistakably in that direction. Yet small-scale industries have not been altogether wiped out of existence. In fact, they are showing an amazing tenacity in face of antagonistic forces of large-scale production.

Some of the causes of the survival of small-scale production, are temporary, in the sense that in course of time they may disappear. They, therefore, do not undermine the logic of large-scale production, though

for the time being, they support small-scale methods of production. In the first place, time itself is an important factor on the side of small-scale industries. Because, even if there is an irresistible tendency towards large-scale production in any industry, it takes time to occupy the entire field. Factories and other necessities of large-scale production like transport facilities can not be built overnight. Large-scale producing units can come to cover the field only gradually; and in the meantime, small scale methods can have a temporary and morbid existence. In India, for example, small-scale metal workers are even now making tools, axes, knives, hoes, ploughshares, utensils, hardware etc., though these can be more cheaply and efficiently done by large-scale methods. Large-scale producing units, however, would take time to cover the entire field. Secondly, large-scale production, with the help of machinery usually involves a substantial reduction in the number of workers formerly engaged in any industry. And if the about-to-be displaced workers have no alternative occupations open to them, they cling to the old methods for sheer subsistence. There is evidently a transitional phase in which the small-scale workers are liquidated in some way or other. Thirdly, the large-scale production requires large-scale capital; and before sufficient capital accumulates in the community, the transformation from small-scale to large-scale is bound to be delayed. Fourthly, the change over may be held up, if persons engaged in an industry fail to show sufficiently aggressive 'economic spirit' to discard less effective methods for more effective ones. Such lack of spirit is particularly noticeable in an industry, held low in social status, by caste-system or otherwise. Men within the industry itself suffer from inferiority complex and men of enterprise from outside are repelled from it. The hides and leather industry in India suffers from this type of social degradation. It is en-

trusted to low caste and class of people, who cannot be expected to show foresight or initiative necessary for the large-scale methods of production. Finally, large-scale production requires large-scale markets, which are not possible without the development of transport facilities and transport facilities, can be developed only slowly, especially if the community has not the spare capital required for transport development. Many of the village small-scale industries in India, like the oil mill's, survive, because the lack of easy transport to the villages gives them a sort of 'protection' against large-scale urban industries.

The above protecting factors are transitory in character, arising from the maladjustment of economy. They are, therefore, liable to disappear in course of economic development. There are, however, certain others which have a more lasting aspect, and to that extent, they dilute the logic of large-scale production. Large-scale production thrives best where machinery can be utilised. But machinery fails in two respects; if the product is to be of diverse and varying pattern to satisfy distinctive individual tastes of the customers, or if it is too crude to be produced by machinery. Handloom weaving in India has survived, due mainly to the fact that it is better adapted to produce to individual tastes than is large-scale machine production. On the other hand, the crude pottery industry and the bidi-making (tobacco) industry fear no displacement by machine industry, because the raw material they use and the type of product they bring out is too lowly for the machine. The cost of transportation also is an effective deterrent on large-scale production. If the commodity produced is too bulky and cheap, cost of transport increases its price substantially and it becomes cheaper to produce the commodity on a small-scale locally, than to produce on a large-scale at any place and then arrange for its distribution over a wide area. Village pottery, brick making, furniture mak-

ing are more profitably conducted locally. Small-scale industry can also resist the inroads of large-scale methods, if the product is to be made from locally available raw material and if labour also is available cheaply. The shoe making industry in India is a case in point. In such cases, the cost of transport of both raw material and finished product is saved in local production, and that is sufficient to make up for the comparative inefficiency of small-scale production. If it is conducted as a by-industry the small scale industry has a still greater advantage. The dairying and poultry farming, carried on as by-occupations in towns, have nothing to fear from competition of more efficient large-scale methods of production. The person engaged in them is not wholly dependent upon these for his livelihood. He can, therefore, afford to sell his spare time and labour at low rates and compete successfully with large-scale production methods. The Indian agriculturist has generally much idle time on hand, in and out of the season. He can utilise this in any suitable by-industry like spinning and can afford to accept only such remuneration as would enable the product to compete successfully with machine product.

Moreover, curiously enough, the machines themselves have in some cases, strengthened the position of the small-scale producers. The sewing machine, for example, being within the reach of any tailor, has increased his productivity and this has strengthened his position, vis-a-vis the ready-made cloth factory. The machines in one industry, in some cases, have provided superior raw material to small scale producers in other industries and strengthened their position. The most outstanding example is that of the weaver in India who uses yarn, cheaply and efficiently produced in a spinning mill. Similarly, the black smiths and copper smiths in India have benefited from the superior type of raw material, they are getting from factories in the

form of regular metal sheets, pipes, nuts, bolts etc. The big industries, moreover, often give rise to small-scale auxiliary industries. The small engineering and repairing work shops are a product of other large-scale industries, like the automobile industries the machine industry etc. Similarly, factory spinning and weaving gives rise to bobbin making industry on a small-scale. The availability of cheap electric power has been another source of strength to the small scale workers. It has deprived the factory industry of one of its major points of superiority over small-scale industry. By making use of electric power, the Japanese small-scale producers, scattered over the whole of the country, demonstrated how small-scale production can stand on its own, against the progress of large-scale production. In Japan, therefore, nearly 64% of the total production used to come from small and medium sized industries. Co-operative effort has been another pillar of strength to small-scale industries. By this, they can achieve the economies of large scale purchasing of raw materials and organised selling of finished goods. The Governments too, in most of the countries, have adopted a sympathetic attitude towards them, because they contribute to a better system of distribution of incomes in a society and make for social contentment. Lastly, as far as India is concerned, the political factor too may be mentioned. The patronage which Khaddar has enjoyed under the Congress has been much helpful to hand-spinning and weaving.

Most of the above causes have been operative in India, and the strength of the small-scale industry is very striking. Some of the small-scale industries, it is true, are simply awaiting to be washed out by the factory industries. Yet, others like hand-loom weaving have stood the competition of the machine production. In 1921, out of 16 millions of actual workers engaged in industries, only 1.2 millions were factory workers. The overwhelming majority of the rest was engaged

in cottage and small scale industries. The most conspicuous of the small scale industries in India, is the hand loom weaving industry. It is estimated that there are about 2 million looms working in the country, giving occupation to about 3 million people. The cloth produced on hand loom is nearly a third of the total cloth produced. Other important cottage and small scale industries in India, are gold and silver work, embroidery, wood and ivory carving, carpentry, leather industry, metal working, pottery, oil industry, flour and milling industry, gur-making, Bidi making, bangle making, dress and toilet making etc.

Factory System vs. Small Scale Production System

As seen above, the small scale industry has not lost its ground entirely to the large scale industry. In certain cases, it has been able to stand up to the competition from large scale methods of production, on its economic strength. Yet even where, it is overpowered from the point of productive efficiency, it has not been without its sympathisers and advocates. Controversies have been still raging among economists and sociologists as to whether in spite of its inefficiency from the point of production, the small scale industry is not preferable from the point of social welfare. Large scale production, conducted usually in big cities with the help of gigantic machines, has been held responsible for various social abuses and miseries. It is pointed out that large scale machine production has reduced the workers to mere human machines; that it enables the exploitation of the workers, that it divides wealth, so inequitably that the masses of people who really work are reduced to utter poverty, while the few that own the machines and do not work can welter in wealth; that the workers are deprived of leisure and decency in life due to enormous condition of work; that the concentration of population in urban areas gives rise to social abuses like miserable housing conditions,

poor health, and rampant moral vices. On the other hand, the system of small scale and handicrafts production has been extolled on the grounds that it gives pleasure of work to the artisan; checks exploitation of labour; establishes more human relationship between employers and employees, if any; checks inequitable distribution of wealth by not leading to separation between the ownership of capital and labour; avoids crowding of population in urban areas and consequent social abuses and so on. It is suggested, therefore, that on grounds of social welfare, the small scale industry should be saved, if threatened by large-scale industry. In India, this view has been gaining remarkable strength under the influential advocacy of Mahatma Gandhi, and his followers. The large scale method of production, inevitably involving the use of large scale machinery and factory system, has been stigmatised, as Western method, something alien to Eastern culture, and which India should not copy from West. The view, however, is not held unanimously. Champions of large-scale methods of production has pointed out that most of the evils attributed to it can be eradicated and the gains of increased productivity and lightened work can be preserved, by re-organisation of the rights of private ownership of capital. It is also pointed out that the small-scale and cottage industries too have not necessarily meant easy or happy conditions for the workers. Long hours, insanitary conditions of work, sweated labour of employees and above all poverty have often marred the small scale and cottage industries as an ideal system of production. The moral of the controversy seems to be that many of the abuses and advantages depend upon the people and the times, not upon the system.

As Buchanan observes, "It is much too early to accept, either with or without private capitalism, the factory system as the highest type of economic organisation. But in spite of the present maladjustments,

both economic and political, in the Western world, the factory tends, like the handicrafts, to be adjusted by long experience so as to preserve the most essential human values. Hours and conditions of labour have been improved and standardized so that a day's work is now perhaps no more trying than it was before the factory came. Besides, the output has been so increased that there is a large gain on that score. While it is undoubtedly true that the first factories in nearly all countries bring a definite increase in misery to the workers, that is, as human affairs go, a relatively temporary phase.and though only a fraction of the gain which might be appropriated for the higher life has yet been realised in any country, neither India for the West need look with regret upon the change which the factory system brings".

(iv) The Joint Stock Form

Modern large scale business is mostly joint stock business. The capital resources of many individuals are pooled together to conduct the business in the Joint stock form. In the old times, business was mostly individual, the scale of production and the total market served being small, the capital that one individual could have at his disposal was usually sufficient for the business. When, however, the scale of business expanded, the capital requirements of a business concern also grew, often beyond the capacity of an individual. It was natural, therefore, that more than one individual should think of coming together, pool their resources and manage the business in partnership. When the capital requirements of a normal business concern increased still further, the partnership form proved inadequate. For, in partnership, the risk in the business is joint and each partner is individually liable-for the entire risk, according to law. Partnership, therefore, can be formed only of persons who are sufficiently intimate with and have complete

trust in one another. When, therefore, capital had to be pooled together, of persons not personally and intimately known to one other, a form of business organisation had to be evolved which would limit the liability of each partner or investor only to the extent of his investment in the business. This is the joint stock form of business with limited liability of share holders.

Most of the large scale modern business is done on the joint stock principle. The chief advantages of this form are : (a) liability to risk being limited to investment only, many individuals can easily combine to start a business; (b) Small savings of persons intending to invest in business but not having capacity or time to manage, can be absorbed, (c) Joint stock companies can become permanent institutions, not needing to come to a close on the death or retirement of any shareholders; (d) the stock being transferable, only those who have confidence in that business concern come to be shareholder at any time. It will be seen, therefore, that the joint stock form with limited liability is very suitable for the purposes of modern large scale business. In fact, such enterprises like the railways, automobile factories, steel works, banks, insurance companies etc. involving vast amounts of capital could not have been possible at all, without the joint stock form.

This form of business, however, is not without certain defects. (i) with transferrable stock and limited liability, it breeds sometimes unhealthy speculation on the stock Exchange market. (ii) The ordinary share holders are generally too ignorant and indifferent. The control, therefore, passes into the hands of a few manœuvring persons, and they are easily able to exploit the share holders to their own advantage. (iii) The management is usually handed over to paid servants. It, therefore, loses in initiative and flexibility. (iv) There is a diffusion of responsibility and it inter-

feres with rapid decisions, which are often necessary for smart business.

(V) Monopolistic Combinations

We have already seen how the advantages to be derived from increasing the scale of production create a tendency for larger and larger factories or plants. But the expansion of a factory cannot continue indefinitely. It comes to a limit sooner or later due to technical difficulties. Some of the advantages of large scale of production still stand to be derived if more than one factories are conducted under one business unit. The same advantages also accrue if various factories, formerly managed as independent concerns come to be combined under one control; i.e. if a further combine is constituted. Such combines further tend to become larger and larger until they cover most of producing units in an industry and come to possess monopolistic power. When combines become so big as to constitute monopoly and thereby are able to eliminate or vitiate competition in the industry, further advantages accrue to the monopolistic combines. In the first place, when competition is eliminated, the monopolist combine is not required to charge the lowest price to the consumer. The price of the product can be raised to suitable level and an extra profit—the monopoly profit—can be secured. Secondly, in absence of severe competition between individual factories, the advertising and selling expenses can be reduced. Thirdly, different sections of the markets can be allocated suitably to different factories and thus much cost of transport may be saved if all factories come to supply only to nearby markets. Fourthly, research can be better conducted by joint effort and all productive units may be able to know and adopt the best methods of production. Fifthly, in times of depression when output is to be reduced as a result of a fall in demand, some of the least efficient plants can

be closed down entirely, instead of reducing output on each plant.

For all these reasons, and primarily for this, that by eliminating competition, consumers can be robbed and very high profits secured, modern industrialists in all countries have shown very great aptitude for forming monopolistic combinations. Of course, the combination movement in all countries has not been equally successful. In the U. S. A. it has been highly successful. In Germany, Japan and India too it has been notable. In the United Kingdom, it has been a bit less remarkable. The factories that have helped or hindered the success of the tendency towards combinations, are the following:-(a) Times of economic distress prompt the competitors to combine (b) Presence of superior foreign competitions in the national market leads nationalists to unite and present a joint front (c) Combinations thrive well behind the protective wall of tariff. This has been particularly the case in the United States of America and in India. The Indian Sugar Industry is a case in point. (d) If essential raw materials are found concentrated in a narrow region in a country, combinations are easier. In the United States of America the oil resources as well as the iron resources are thus found concentrated. Diffusion of raw-materials, on the other hand, handicaps combinations. The British coal and iron deposits, dispersed widely over the British isles have not been very conducive to monopolistic development. (e) Railways also can help the combinations. Their services are generally essential for any large scale business and they can favour one competitor against another, and thus foster the growth of only their favourites. In the United States of America, the growth of the United States steel Corporation had much to do with the favourable policy of the railway serving its region. (f) The prospect of conquering a foreign market by joint effort-goads national producers to unite (g) Sometimes, even

the Governments themselves encourage the formation of combines for the sake of capturing foreign markets and also to increase efficiency of production. This has been the case in modern Germany and Japan.

On the other hand, the absence of the above conditions hinders the success of combinations. In addition, certain other conditions tend to check their success. (a) the Government may try to check them by legislation. In the U. S. A. laws have been passed against the formation and functioning of the combines, but with very little effect (b) Political and business traditions also count to a certain extent. Autocratic political tradition help concentration of control in industry as in Germany, but democratic tradition in politics and conservative tradition in business may hinder combinations as in Great Britain.

Monopolistic combinations are of two kinds horizontal and vertical; horizontal when factories producing a similar product combine; vertical when factories concerned with the different stages of manufacture of a product combine. When many spinning mills producing a similar product i.e. yarn combine, it is horizontal combination. An example of vertical combination is provided by the U. S. Steel corporation which in 1900 controlled.

Iron ore mines.	Railroad & shipping docks.
Coal mines.	Blast furnaces.
Coke plants.	Rolling Mills furnaces.
Natural gas plants.	

Manufacturing factories for rails, tubes, tin plates,
Bridges, cars, Engines, Electric goods etc.

The success of the combination movement in various countries has been spectacular. In the U. S. A. according to the census Report in 1900, 185 combines controlled 2040 plants worth \$. 1436 millions and employing 400,000 workers. In 1904, some of the most re-

nounced combines or Trusts were, Amalgamated Copper Co., Consolidated Tobacco Co., Standard Oil Co., U. S. Steel Corporation, American Bell Telephone Co., etc. In Germany, there were only 6 Kartells or combines in 1870. These were, however, 275 in 1914. The Rhenish Westphalian Coal Syndicate controlled all coal production, the Steel Workers Union, all steel production and the A. E. G. Siemens combine practically all electric goods production. In Britain, the Committee on Trusts (1919) noted 93 combines and declared that within a short period they might come to control all important branches of British trade. The Coats combine in sewing threads industry, the Distillers Co. in whisky trade, and the Lever combine in soap making were some of the notable combines. In India too, combination movement has made much progress in cotton and jute textiles, in iron and steel, in sugar, in tea etc. The managing agency system has been very helpful because it very easily unites management of different factories in the same industry as well as in diverse industries. The Tatas, the Birla Bros. Ltd., the Dalmia Jain Ltd. The J. K. Industries are some of the notable instances.

Since the combines rob the consumers they are very rightly criticised by them. The combines are also harmful, because they, by their wealth, become powerful enough to influence, bribe and corrupt politics, legislature and government services. They come to control the press too, and thereby black out any unfavourable opinion or news, and thus become a danger to the freedom of the press. In fact, freedom and democracy themselves are endangered when the control of the nation's economic activity passes into the hands of a few self interested individuals, and combines.

in view of the fact that Industrial and Agricultural Revolutions increased the productivity of all countries tremendously.

It should also be noted that population is stimulated by improvement in the sanitary conditions and the diet of the people, and by cure and prevention of diseases and epidemics. Substantial progress was registered on all these lines after the Industrial Revolution.

The growth of population is some times also linked with the prospects of employment. Expanding prospects, psychologically and physically, stimulate the growth of population. The Industrial Revolutions increased the opportunities of employments immensely and thus stimulated or at least allowed the growth of populations.

(2) Concentration of Population in Industrial Areas

The concentration of population in industrial areas was another feature of the growth of population. Before the Industrial Revolution, agriculture was the mainstay of the population, and naturally it tended to be denser in agriculturally prosperous regions. In England, the Southern half was thus prosperous and the Northern one was barren. English population, therefore, had gravitated towards the South. Even now, the Southern half is full of 'ancient towns, proud of their colleges, their castles and cathedrals but stunted and sleepy as though wrapped in themselves within their own walls.' The Industrial Revolution turned the scales in favour of the North. Mining and manufacturing developed rapidly in the North West and surpassed the Southern agriculture in providing increasing employment and livelihood to Britain's growing population. Population, therefore, has been crowding in the North West. The density of population in the Northern half, at the close of 19th century

was 720 per sq. mile; while in the Southern half it was only 530 per sq. mile and only 320 if London was excluded. Similarly, in the U. S. A. population has tended to be densest in the North eastern region where industry has been the thickest. In other countries, too, population has gravitated towards industrial regions. We can, therefore, say that under Industrial Revolution, industrial regions in any country exert a greater pull on population than other regions. Of course, the statement will be applicable only where industrial development has advanced enough to surpass agriculture in giving employment to population. In India excepting certain big towns, there are no dense industrial areas. Agriculture is still the predominant occupation of the people. Hence, concentration of population, in what may be called industrial regions is not noticeable. The most densely populated parts are Bengal, the U. P., Madras etc., which support the population more by their fertile lands than by their productive factories.

(3) Rise of Big Towns

The modern large-scale industries have tended to be concentrated in big towns. The industries are dependent on raw materials, markets, transport facilities, commercial agencies, financial institutions, the labour market, the Government Offices, the press etc. In fact all these are interdependent and can be best worked when in close touch with one another. It will be seen that many of the above mentioned agencies are the creation of the Industrial Revolution, and in each one of them, the scale of activities has been enormously increased by it. The growth of big towns, therefore, is a phenomenon which can be attributed to the Industrial Revolution. In England, before the Industrial Revolution, there were few big towns, except London. In 1901, however, there came to be 37 towns having more than 1,00,000 population each.

In Germany, at the same time, there were 33 similar towns. In France, however, there were only 15. In large scale Industries, France is not as advanced as Germany or England and hence the low number of big towns.

A comparative view of the industrialisation in the various countries can be had from the statistics of the urbanization of the population. In 1931, the urbanised population of U. K. formed 80% of the total, that of Germany 64% of the total in 1925, that of U. S. A. 56% in 1930, of Japan 25% in 1935, and of Russia only 19.4% in 1939. In India the percentage of population living in towns only increased from 9.5% in 1891 to 11% in 1931. The low urbanisation figure is a sufficient proof of the backward industrialisation of the country; and the almost stationary figure of urbanisation suggests that industrialisation is not at any rate increasing faster than the population.

While the growth of towns in Western countries can be very largely attributed to the development of industries and other auxiliary activities, the same thing can not be said of India. In fact, as Dr. Gadgil points out, the growth of modern large-scale industry has played only a secondary part in the urbanisation of the Indian population. Among the modern big towns, only a few like Bombay, Calcutta, Madras, Jamshedpur, Ahmedabad, Cawnpore and Madura owe their growth to industrialisation. And even among these, in case of Bombay, Calcutta and Madras, the trading activity, as distinct from producing activity, has much to do with their growth. Delhi, Lahore, Multan, Karachi, Meerut, Bareilly, Nagpur, Poona etc. owe their importance largely to their being convenient trade depots. Industrialization, therefore, cannot lay claim to the growth of these towns. Of course, some industries have certainly developed in these towns and made them more populous. The growth of these

towns, however, cannot be primarily attributed to them. On the other hand, the growth of large scale industries in India has led to the decay of some native industries; and some former prosperous towns have declined with them. Murshidabad—a town which in Clive's time was considered superior to London. Dacca, Malda, Santipur, Amritsar, Paithan etc. have decayed in modern times.

The growth of towns is attended by important social effects. The evil effects of the concentration of population in big towns can be briefly stated. The crowding of population accompanied by the inevitable dirt and smoke of industries, pollutes the air and makes city life unhealthy. When the city develops, the housing and sanitary facilities do not develop fast enough and this seriously affects the health of population. The slums in Bombay, Calcutta, Cawnpore, are convincing testimonies of the housing difficulties of the growing industrial population. The fact that infant mortality rate is the highest in slums is another proof of the harmful effects of overcrowding in towns. City living further is costly, compared to living elsewhere, and the worker's wage is rarely sufficient to give him a decent standard of living in the cities. He cannot afford good diet or medical help, or education to his children and family. In effect his life becomes miserable and the misery leads to moral degradation and to vices like drinking, gambling, prostitution, etc. Due to the difficulties of accommodation and the high cost of living, many workers cannot afford to maintain their families in cities and thus are deprived of the pleasure and comforts of the home life.

On the other hand, there is also a bright side to the picture. Big towns can afford certain amenities of life better than small towns or villages. They can boast of transport facilities, recreation centres like cinema houses, cultural centres of various sorts, institu-

tions of higher education, better contact with outside world etc. The big towns are also good breeding grounds of political consciousness. The rise of democracy in modern times certainly owes not a little to the rise and growth of big towns.

(4) Migrations of Peoples

The development of the facilities of travel has afforded the movement of people within the country itself. People migrate from the countryside to centres of industry in search of employment. The increased tempo of trade necessitates movement of people on a large-scale. Over population in one part of the country and labour scarcity in another leads to migration from one part to another. In India, the tea plantations of Assam have thus invited labourers from other provinces.

Migrations from one country to another arise out of the colonizing, settling and conquering activity of the people. The continents of America, Australia, and Africa are peopled by such migrants from the European countries. Many Europeans have migrated to Asian countries also, in furthering their trade and in establishing their empires. International migrations may also take place when new countries are in need of labour from old countries. Thus many Indian, Chinese and Japanese labourers have migrated to South Africa, Australia and New Zealand.

Movement of people in modern times has been facilitated by the development of communication and travel facilities. The discovery of new and 'vacant' lands has prompted the migrations of adventurous colonisers. The weakness of certain countries—especially Asian—has invited the immigration of conquering Europeans. The absence of political, social and religious restrictions has helped the free movement of people at least till recently. The religious persecu-

tion in some European countries drove away many people to seek shelter in new lands. The economic distress in old countries and the brighter prospects in the new, gave rise to mass migration of people, especially from Europe. The shipping companies too, in their own interests, encouraged migrations even by kidnapping or enticing people.

The international migrations of people have created certain intricate problems of modern times. For the mother country, the emigration of her unwanted people does give a relief. But mass migration of able-bodied young men may impoverish her and also entangle her in political disputes about the status and privileges of the migrants to new countries. The Indian migrants to South Africa, Burma, Malaya and other countries have recently been the cause of much headache to both the Indian and the foreign governments concerned.

For the country of the destination, the immigrants create certain nasty problems. If they are really fulfilling a need and are required for developing the country economically, the immigrants may be welcome. But more often than not, the immigrants are not wanted, especially if they are not of the same race, language and culture of the earlier inhabitants. The immigrants cannot easily tear off their ties with their motherland, nor can they easily inculcate the feeling of loyalty to the new country. The new country thus becomes unwilling to shelter men of questionable integrity. On economic grounds also, immigrants from Asian countries are not welcome in recent times in the new countries already settled by European colonisers. The immigrants have generally a poorer standard of life. The high-paid labour in the new countries fears underbidding from the new immigrants and, therefore, takes up a hostile attitude. As a result, the new countries of America, Canada, Australia, South

Africa etc. have recently put severe restrictions on immigrants.

(5) Industrial Proletariat And Class-Conflict

We have already seen that before the Industrial Revolution, the artisan owned his tools and himself managed his business. But the Industrial Revolution brought in costly power-driven machines producing on a large-scale. It was no longer possible for the artisans to own the machines or manage the business. The ownership of machines and the management of business, therefore, went into the hands of capitalists, and the former artisans had to accept a position of mere wage-earners, working on the machines and raw materials supplied by the capitalists. The workers were paid the minimum wages, enough only for bare subsistence, and the rest of the produce was pocketed by the capitalists as their profits. The workers were helpless in face of this inequitable and unjust distribution of wealth; because they did not own the machines or the means of production. The machines and the capitalists private ownership of the machines, thus gave rise to a class of industrial workers—the proletariat which had nothing but its labour to sell on the market.

The advantages of the large-scale methods of production tended to make the unit of production progressively larger; and the smaller producers were correspondingly squeezed out of the market. Their competitive position in relation to larger units of production went on progressively worsening. They, therefore, ceased to be producers and joined the ranks of wage-earners. Thus on the one hand, the army of the property less industrial workers went on swelling, and on the other, the increasing means of production of the society got concentrated in fewer and fewer hands. The society came to be divided into two classes—the

poor but big class of wage-earners and the rich but small class of capitalists.

The economic interests of the two classes further came into conflict. The interest of the capitalist class consists in maximising its profits; that of the working class in maximising the wages. But since, the wages and the profits are the only two parts of the total income of the society to be divided, the interests of the capitalists and workers are mutually antagonistic. Profits can be increased at the expense of the wages and vice-versa. The workers in self interest try to organise themselves and form a common front against the capitalist class. On this united strength and on the strength of such measures as strikes, and political propaganda, the workers try to win the utmost from the capitalist employer. On the other hand, the employers organise themselves and use all their economic and political power to break the strength of the workers, and to increase their profits. A class conflict thus develops and grows in intensity, as organisation, consciousness of rights and importance, political power, etc. go on developing on either side.

(6) The Evils of The Factory System

The factory system was a peculiar product of the Industrial Revolution. The large-scale use of machinery, the capitalists' ownership of the machines and the employment of wage-earners to work on the machines had all combined to create the factory system. It was managed by the capitalist for his private profit. Consequently the factory system, until regulated by the Governments, was contrived only to suit the capitalists policy of maximum profit. It did not consider the interests of the workers as human beings at all. To do so was to go against the capitalist owner's interests. The factory system, therefore, gave rise to many evils from the workers' point of view.

Some of the evils were regarding the conditions of work for the workers. To save space and cost in building construction, the machines and men were very much crowded together. No attention was paid to ventilation or lighting of the buildings. No sanitary and hygienic precautions were taken. The workers were required to work in dirt and filth. The machines generated oppressive heat, humidity and noise. The employers took no precautions to guard by fencing any dangerous machinery. Accidents, therefore, were frequent and the workers suffered helplessly.

Other evils arose out of the employment of women and children. The employers willingly engaged women and children, because they could be paid less than men; and they were more amenable to the discipline and dictates of the employers. The employers, therefore, welcomed women and children. And the Poor Law workhouses in England readily unloaded their burden of pauper children. The deal was satisfactory to the employers and the workhouses, but the unfortunate victims were condemned to virtual slavery. Even small children were worked for excessive hours of sixteen a day and night. They had to work standing or stooping constantly, and, in their tender age, they were deformed. By overwhelming fatigue, they used to drop down and often suffered accidents. The employer provided them with scanty food, which they ate in the dirty surroundings of the machines. Lest they slackened in their work, they were supervised by jobbers who did not 'spare the rod and spoilt the child.' The children employees had no holidays, no leisure, and no time or provision for education.

The women employees too suffered from excessive hours of work. They had no leisure or relief for their household work. They had no time even to attend to their babies. They were worked day and night, with harmful effects on their health and character.

If this was the state of work for women and children, the state of work for men was still worse. Women and children could at least evoke some pity from the merciful among the employers; the men none. Excessive work, without break, leisure or holidays was their unenviable lot.

(7) Factory Legislation

The employers and the workers were the parties to the factory system of work. The employers did not think of improving it, as any improvement correspondingly reduced their profit. The employees could not change it, because, in their unorganised State, they were totally helpless. Improvement in the conditions, therefore, could not have been initiated by either of the parties to the system. Yet the system was evidently a social evil, and an outrage against decency and humanity. It was, therefore, bound to be changed, and social pressure was exerted on the only outside agency competent to intervene, namely, the State.

The advocates of the State's action in regulating the factory system, based their case firstly on the consideration of human decency and philanthropy. From this point of view women and children in the first instance, could be made subjects of the State's special care. The earlier factory legislation, therefore, related to the employment of women and children only. Later on, however, the basis of State's intervention changed from philanthropy to the State's obligation to safeguard the interest of the down trodden. From this point of view, the State came to intervene and regulate the conditions of employment of all employees.

The factory legislation by the State was resisted on many grounds. Some of them were pseudo-philanthropic. It was argued that if conditions of work were improved with greater cost to the employers, the employers would not be able to provide work to all. Un-

employment would increase. Moreover, if the workers were allowed greater leisure, they would misuse it in vice and crime. Some other arguments were doctrinaire. They questioned the very competence and advisability of the State's intervention in the free and voluntary contract privately entered into, by the employers and the employees. According to the Laissez-faire policy, prevalent in the first half of the 19th century, the State was best advised to keep neutral in economic matters. Further, on economic grounds also, the factory legislation was disputed. It was argued that the employers' profit arose only out of the last working hour of the day. If the last hour was curtailed, the employer will cease to make any profit at all. Moreover, it was pointed out that if any nation, by itself, imposed any restrictions on its employers, it would correspondingly jeopardise their position in the competition with foreign employers. On economic grounds, therefore, the factory legislation was denounced as suicidal.

These arguments against the factory legislation were fortunately proved wrong. It was found out that by reducing the excessive hours of work, the worker's productivity and the total product, in fact, increased. The economic arguments, therefore, were played out. The doctrinaire opposition also lost ground, when in the latter half of the 19th century, the Laissez-faire policy was changed and the State stood forth as the active regulator of the society's economic activity. But due more than to the change in the doctrinaire attitude, the factory legislation was undertaken under the pressure of social conscience which was roused by the horrors of the factory system.

Regarding Conditions Of Work

The objectives of the factory legislation were evidently to eradicate and temper down the evils of the

factory system, described above. The conditions of work in the factory were sought to be improved by regulating the space, ventilation, lighting, sanitation and humidity in the factories. Dangerous machinery was required to be fenced off. Women and children were prohibited from being employed in certain dangerous processes using lead, phosphorus etc. and in harmful processes like wool-sorting.

Regarding Children

In case of children, the objects of the factory legislation were to prohibit the employment of children below a certain minimum age, to reduce the numbers of hours of work for children between certain ages, to provide them holidays and regular off days, to arrange for their compulsory schooling, to prohibit their employment at night and so on.

In Britain, the Apprentices Act was passed in 1802 and made applicable to pauper children taken as apprentices in the factories. The Act was applied to cotton and woollen factories. It limited the maximum hours of work to twelve a day. Night work after 9 P.M. was banned. Provision was also made for the clothing, instruction and medical care of the apprentices. Officials were appointed locally to visit the factories and to report the breach of law, if any. The Act, however, was largely ineffective, because the visiting officers could not properly enforce it. Besides, the Act, applicable only to pauper apprentices, was avoided by the employers employing wage-earning children. Hence, in 1819, another Factory Act was passed which was applied to all children in cotton factories. No child under nine years was to be employed. Children between 9 and 16 years were to work for twelve hours a day at the maximum. One and a half hours were allowed for meals. Yet this Act too, like its predecessor, was inadequately enforced and easily evaded. The next

important Act was that of 1831, which applied to cotton factories. It limited the hours of work of persons below 18 years to twelve a day; and night work for persons under 21 years was prohibited. The Act too, was inadequately enforced, though occasional proceedings were instituted under it. The really effective Act was passed in 1833. It applied to all textile factories, excepting the silk mills. According to it, no child under nine could be employed, children between 9 and 13, could be employed for 9 hours a day and 48 hours a week, and moreover, two hours schooling was made compulsory for them. Young persons between 13 and 18 years were to work only twelve hours a day and were not to work at night. For enforcing the Act, four factory inspectors were appointed with powers to fine defaulting employers. The Act is of special importance. It introduced the system of special inspectors for enforcement. It also introduced the system of compulsory schooling of children whose hours of work were reduced for that purpose. The next important Act was that of 1844. Under it, no child under eight was to be employed. Children between 8 and 13, were to work for 6 ½ hours per day, with 3 hours additionally at school. Meals were to be taken out of the work rooms, and the meal time was to be observed by some public clock. In 1867, the Factory Act of 1844 was extended to workshops where children were employed. In 1874, another Act was passed prohibiting the employment of children under 9 years; and the half time system of work was extended to those under 14. The next important legislation was the Factory and workshop Act of 1891. Children under 11, were not to be employed. By another Act of 1895, work of all children was limited to 30 hours per week. Children under 14 years were not to do night work. Further, by the Act of 1901, the minimum age of employment was raised to 12 years.

In Germany factory legislation regarding the em-

ployment of children was undertaken by Prussia in 1839. The Factory Act of that year prohibited the employment of children under nine years of age. Children under 16 years were to work for 10 hours per day and were to attend school for 5 hours a day. They were also not to work at night. The enforcement of the Act was left to local police and teachers. Consequently the Act was ineffective. In 1853, therefore, another measure was passed. Its enforcement was entrusted to specially appointed inspectors. It raised the minimum age of employment to 12; and limited the hours of work for children between 12 and 14 years to 6 hours a day, with 3 hours at school. The Act was quite a progressive measure judged by those times; but due to the opposition of factory owners, it was practically left unenforced. The next important legislation was the Industrial Code of 1891. It prohibited the employment of children under 13 years of age. No child above 13, who had not finished its elementary education could be employed. Work of children below 16 years was limited to 10 hours a day. Factories employing persons below 18 years were to take special care of their health and morals.

In India, the Factory Act of 1881 was the first measure regulating the employment of children. It was made applicable to all perennial factories employing more than 100 persons. No child below the age of 7 was to be employed; and the hours of work for children between 7 and 12 years were limited to 9 hours a day. They were also given four holidays in a month. The conditions of employment of children were further improved by the Factory Act of 1891. The minimum age of employment was raised to 9; and children between 9 and 14 years were to work only for 7 hours a day. Night work was banned. Similarly they could not be employed in dangerous occupations. The third Factory Act was passed in 1911. It reduced the hours of work of children employed in textile factories to 6

hours a day. Their employment was prohibited before 5-30 a.m. and after 7 p.m.

In Japan, the Factory Act of 1911, which applied to factories employing more than 15 persons, prohibited the employment of children below 12, limited the work of children between 12 and 15 years to 12 hours a day. They were also not to be employed between 10 p.m. and 4 a.m.

Regarding Women

The major objectives of factory legislation regarding the employment of women were to limit their hours of work and to prohibit their employment at night.

In Britain, the Factory Act of 1844, limited the hours of work for women to 12 a day. In 1847, the hours of work were reduced to 10 a day. In 1850, the work of women was required to be only between 6 a.m. and 6 p.m. with one and a half hours of rest. The Factory Act of 1874, limited the hours to 10 a day and to 56½ a week.

In India, the Factory Act of 1891 limited the hours of work for women to 11 a day. In 1908, they were reduced to 10 a day.

In India, the Factory Act of 1891 limited the hours of work for women to 11 a day at the option of the women employees; provided a recess of an hour and a half; and prohibited their employment at night. The Act was made applicable to all factories employing 50 persons or more and empowered the Provincial Governments to make it applicable to factories employing 20 or more. In 1911, another Act prohibited the employment of women before 5-30 a.m. and after 7 p.m. except in ginning and pressing factories. The Act was made applicable to seasonal factories, which were excluded by the earlier Act of 1891.

In Japan, the Factory Act of 1911, for the first time limited the hours of women's work to 12 a day, and prohibited their employment between 10 p.m. and 4 a.m. It also prohibited their employment for five weeks after confinement.

(8) Trade Unionism

Trade Unions are associations of wage-earners for the collective effort at improving their conditions economically, politically and socially. In the old organisation of industry, there was no class which was merely and permanently a wage-earning class. Artisans were independent businessmen, working on their own accord. There could not, therefore, be then any trade unions of the modern type. The old guilds were not associations of wage-earners, and hence no 'trade unions.' It must be noted, however, that in the period of the decay of the craft guilds, there arose a class of journeymen—wage-earners, who could not hope to become independent artisans. They had formed their own guilds also, in some places. These guilds, then being associations of wage-earners, may be called the forerunners of the modern trade unions.

The need for the collective organisation of the workers arises, because individually the workers are no match to the employers. The workers are propertyless and are in a hurry to sell their labour and earn a livelihood. The employer is fortified in his position by his capital; and on its strength can dictate terms to labour. The workers individually are completely at the mercy of the employers. And the horrors of the early factories abundantly showed how the employers did exploit their advantageous bargaining position. The workers can counteract the situation only by developing collective bargaining strength, through their own associations. The State is indeed an agency, which is competent to bring about a satisfactory condition for the workers. But throughout the history of

Industrial Revolution, the States, everywhere, have not shown themselves willing and active to achieve for labourers what their associations had in view. In fact many States have joined the battle on the side of the employers. The workers, therefore, have been required to build up their own strength and to achieve their objectives in face of opposition from the employers and even from the State.

Functions

The functions of the trade unions are fourfold. In the first place, they can act as friendly societies of workers, for mutual help in economic needs and on social occasions. This they can achieve by forming an association and raising a fund by subscription.

Secondly, the function of the trade unions may be the collective bargaining with the employers in respect of wages, allowances, hours of work, conditions of the work places, share in the management of the factories, safeguarding of the employment of trade union leaders, etc. The methods employed to achieve their objective are organisation, collective negotiations with the employers, representation of their cases with the Government or such of its agencies as the Industrial Courts and Tribunals. propaganda in rousing public sympathy, peaceful picketing and ultimately strikes. This activity of the trade unions is often called 'pure trade unionism.'

Thirdly, the function of the trade unions may be to conduct welfare activity for the workers. The trade unions may look to the provision of housing, education, recreation facilities, information about employment in various industries and centres etc. They may conduct their own newspapers, presses, libraries, resthouses, gymnasiums, schools, creches, dormitories etc. These functions are achieved by raising funds through subscriptions.

Fourthly, the Trade Unions may engage in political activity. They may try to secure governmental power, through peaceful parliamentary methods. For this they form political parties of their own. Or they may try to secure the governmental power through an armed revolution. For this purpose, they build up secret societies and may even invite foreign help.

In England

In England, trade unionism was illegal upto 1825. The Government of the time feared a revolutionary activity on the model of the French Revolution. Moreover, it opposed trade unionism, on the point of the prevalent economic theory, which abhorred any association destroying or vitiating free competition on the market. But by 1825, there was a change in the government's attitude. It was persuaded that the workers' conditions may not improve without the workers' collective effort. By the Trade Union Acts of 1824-25, combinations for the purposes of negotiating wages and hours were allowed. The next important step by the Government came after forty years. In 1867, a Royal Commission was appointed to investigate the working of the Trade Unions. It was complained against them that they were the cause of frequent strikes, that they spoiled the friendly relations between employers and men, and that they generally acted in restraint of trade. On the other hand, the unions complained that most of their aims and activities were still illegal and that, not being legally recognised bodies, there was no legal protection for their funds. The Commission went into the question, and was divided in its findings and recommendations. But both the Majority and Minority Reports were in favour of the workers, though in different degrees. The Majority found that the disposition to strike did not increase with the power of unionism. The Minority found that disposition to strike was in fact checked

by large unions, that they made for stability of trade and that violence in methods decreased with the rise of strong unions. The Majority recommended that more types of activities of the trade unions should be legalised, that unions should be legally recognised bodies, that protection should be afforded to their funds and that the unions should keep separate their funds for friendly benefits and those for union activity as such. The Minority Report recommended that all anti-trade union laws be repealed, that trade unions should be legally recognised and legal protection be afforded to their funds.

On the basis of these recommendations, two Acts were passed in 1869 and 1871, providing for the registration of the unions and for the protection of their funds. Another Act in 1875, definitely legalised peaceful picketing. An Act of 1906, relieved unions of civil liability for damages arising out of strikes. In 1913, the Trade Union Act sanctioned political activity for the unions and the collection of funds for the political activity. But freedom was allowed to any worker to 'contract out' and dissociate himself from the political activity of his union.

Trade Unionism thrived first among skilled factory workers. In relation to other workers, they were more alert; they were concentrated in towns and could easily form unions. They could also afford to pay subscriptions to the union funds. The unskilled and agricultural workers suffered from being scattered, poorer, and more ignorant. They had, therefore, to wait until the end of the 19th century, before they could organise themselves. Their organisation was called 'New unionism.'

In the last quarter of the 19th Century, the trade unions with a view to increase their strength, showed the tendency to form nation wide federations of different industries. The Miners Federation was formed in

1889, Engineering Federation in 1890, Printers Trade Federation in 1891, National Union of Railwaymen in 1913 and so on. All of them had also formed their highest organ—the Trade Union Congress since 1868. By 1914, the trade unions in Britain had a total membership of 4 million.

In the last two decades of the 19th century, the trade unions developed their political activity. In 1893, an Independent Labour Party was formed with a view to improve the conditions of workers by state action and ultimately to establish socialism by parliamentary methods. In 1909, the Labour Party was reorganised.

It will be seen that from 1825, the State's attitude to unionism in England has been considerably liberal and sympathetic. Perhaps due to this, and also due to the democratic traditions of the country, trade unionism in England always remained wedded to peaceful methods. It did not develop that revolutionary radicalism, which marked trade unionism in other continental countries.

In Other Countries

In Germany, the State was autocratic throughout the 19th century. It did not look upon 'the workers' activity with favour. Up to 1869, trade unionism was banned. It was allowed in that year, but was again banned in 1878. It was allowed once again from 1891. But throughout the period upto the first World War, its growth was hampered by various types of restrictions on public meetings, associations of certain types of workers, labour strikes etc. German trade unionism had to grow in the face of government's opposition. Yet by 1912, there were 400 unions with a membership of 3 million. Perhaps due to the hostile conditions of its growth, German trade unionism has been largely associated with the political purpose of overthrowing the capitalist state and bringing in Marxian socialism

by revolutionary methods. In the absence of a democratic system and democratic traditions, it never placed much faith in peaceful parliamentary procedure of winning the State power. For the same reasons, German trade unions did not show much inclination towards collective bargaining with the employers, with a view to arrive at compromises, however, temporary in character.

In the U.S.A., trade unionism remained weak upto 1914. The reasons were: (a) The general conditions of work, wages, hours of work etc., were far better in America than in other countries. Unionism, therefore, was not so badly needed. (b) The workers were mostly new immigrants, divided between themselves by racial differences, languages and ideologies. (c) Dissatisfied workers in industries had good prospects open in agriculture. (d) The Democratic and the Republican parties were too strongly entrenched in politics to give any hope to workers for a party of their own. The political activity was thus throttled. (e) Conditions differed in different States; and workers could not pick up common grievances. (f) American workers were divided into top-class highly paid skilled workers, and low-classes unskilled workers. Both the classes could not unite because of their different economic conditions.

In India, upto 1914, there was no real growth of the trade union activity. The meagre industrialisation of the country was partly responsible. The workers also were too ignorant and too poor to interest themselves in trade unionism. Their heterogeneous character in respect of races, religions, sects, languages etc. was a further obstacle.

(9) Social Insurance Schemes

In the old economy, the place and function of every person was determined by traditions, social conventions, social institutions and the laws. The individual

had not the free choice of economic enterprise. But this disability was in a way compensated by the security of livelihood which the old system of economy assured for everybody. In the modern economy, the individual has gained economic freedom but lost the security of livelihood. The modern worker suffers from the fact that his earning are insecure. They may be cut off during his sickness, unemployment, old age, accident causing temporary or permanent disablement, etc.

Against this insecurity, the worker might have been protected, had he any property or savings to fall back upon. But his low wages debarred any such possibility. He might have been protected also in a joint family or clan, the earning members supporting the non-earning members. The break-up of the joint-family in the prevalent circumstances ruled out even this possibility. The social and economic circumstances thus necessitated that some extra provision be made to safeguard the worker against the insecurity of earnings.

Such a provision is the social insurance schemes of the modern times. The schemes are based on the fact that, though the uncertainty is incalculable in the case of an individual, it is calculable in the masses of workers. The actuarial science is able to calculate fairly accurately the total joint risk or liability of the mass of workers; and adequate provision can be made against this total risk by averaging it for all the workers.

In any insurance scheme, a fund is raised. It is contributed to, by all the workers covered by the scheme. The employers also may be made to contribute to it, on the ground that they are a party to the system which creates the uncertainty of earnings to the workers. The State also may agree to contribute, if it accepts that misery in any section of the people is harmful to the society as a whole. The scheme may be voluntary, if

the entry into the scheme is left to the discretion of the worker. But the policy of the modern States is to make such schemes compulsory for all workers engaged in particular industries and trade.

In Britain

In Britain, the unemployed persons have been helped by the Poor Laws from the 16th century onwards. Each locality was made to raise a fund for the relief of the poor in that locality. Such provisions, however, were not evidently of the class of social insurance schemes. The Old Age Pensions Act of 1908 was the first scheme of this type. According to this Act, every person reaching the age of 70, was provided 10 shillings a week at the expense of the State, provided his income was below a certain minimum. The National Health Insurance Act of 1911 was another measure. It provided against sickness and unemployment. In regard to sickness, the benefit of the scheme accrued to workers earning less than £160 a year. The benefits were free medical help, a cash allowance of 10 shillings a week after a certain number of contributions were paid by the workers, a disablement allowance after 26 weeks of continued illness, and a sum of 30 shillings to the wife of an insured worker on her confinement. The scheme was contributed to by the workers, employers and the State. In regard to unemployment, the Act was applied to house-building, ship-building and engineering industries. After a certain number of contributions were paid by a worker, he was entitled to a weekly unemployment benefit of 7 shillings for a maximum period of 15 weeks in each insurance year.

In Other Countries

Germany was ahead of all nations in social insurance schemes. The State in Germany had throughout the 19th century, high traditions; and it realised soon enough that the social Insurance schemes were neces-

sary for the peace, contentment, and strength of the society. Hence, Bismarck, the great prime minister of Germany, introduced in the eighties of the last century a triple scheme of social insurance against sickness, accident and old age. By an Act of 1883, all industrial workers, earning less than 2000 marks a year, were covered by a compulsory scheme of sickness insurance contributed by the employers and the workers. The sick worker received free medical help and a cash allowance equal to half of his pay, during the maximum period of 13 weeks (26 weeks in 1904). The Act of 1884 provided for accident insurance. According to the Act, the employer was required to pay a lump sum to the dependents of a worker in case of fatal accident. If the worker was disabled for life, he received a pension equal to $\frac{2}{3}$ of his wage. Proportionate compensation was paid in case of minor accidents. Invalidity and old-age pensions were provided by the Act of 1889. The pension fund was contributed by workers, employers and the state. Every worker, earning less than 2000 marks a year, got a pension proportionate to his total contributions, on reaching the age of 70. Invalidity pensions were also paid in case the workers became disabled for work permanently.

In India, no social insurance scheme was inaugurated before 1914, owing to the general backwardness of the economic conditions and the inefficiency and indifference of the foreign rulers.

CHAPTER X

REVOLUTION IN COMMERCE

Commercial Expansion in Pre-Modern Times

Section I Old Commerce

In the old economic system, commerce was handicapped mainly by the following factors:

- (1) In the absence of easy means of transport, movement of goods was extremely costly; and bulky goods could not be moved at all.
- (2) Before the 15th century, there were no strong national governments, which could maintain peace in the countries. Frequent wars between feudal lords rendered commerce highly risky. On the high seas also, nests of pirates were thriving, with great harm to sea trading.
- (3) The local guilds and the feudal lords imposed tolls and various types of restrictions on the merchants.
- (4) The system of production in villages and towns had adjusted itself to the old conditions of isolated and self-sufficient local economies. The system of producing for distant markets could take root only gradually.
- (5) Commerce was checked by the scarcity of money.
- (6) Excepting in England, commerce was hampered by the confusion of many local currencies.

As a result, trading was not easy. Of course, there was some meagre trade; but it was inevitably restricted to such few things as salt, precious metals, spices and luxury goods. Cheap and bulky goods could not bear the cost of transport and the rate of profit necessary to compensate for the heavy risk involved. Commerce, therefore, served the comfort of a few rich people. The poor masses of people remained untouched.

Promoting Forces

From the middle of the 15th century, however, there appeared certain factors, stimulating the growth of commerce. Till the middle of the 15th century, the very lucrative trade with the Eastern countries could be carried only along the land route passing through the Mediterranean countries. The Mediterranean itself was bordered by the then prosperous countries. Venice and Genoa were, therefore, the biggest trade centres; and the merchants of these cities fully exploited their advantageous geographical situation to the envy of the Western European merchants. The Western European merchants, therefore, were spoiling for an alternative trade route to the Eastern countries and also for openings for commerce in other directions. Explorations were undertaken into the uncharted seas to find out other trade routes.

In 1453, the Turks captured Constantinople and imposed heavy duties on the trade passing through it. The land-route of trade with the Eastern countries became consequently less profitable. It also suffered from depredations of the migrating hordes of wild nomads from the Central Asia. These difficulties of the former land route prompted explorations for new ones by way of sea.

The rise of nationalism was another important factor. It is true that the rise of nationalism was itself partly the effect of growing commerce. But it is also

true that nationalism in its turn helped the cause of geographical explorations and the growth of commerce. By the end of the 15th century, strong national government came to be established in England, France, Spain and Portugal. The idea of a nation and the sentiment of national pride emerged; and the new nations soon got involved in rivalry about national glory and aggrandizement. The old feudal wars within the country now gave place to international wars. All the nations soon realised that national economic prosperity was a major war-winning factor. The nations, therefore, turned to expand their trade and accumulate precious metals. Geographical explorations were undertaken in search of new lands that would give rich trade and disgorge abundant precious metals.

As a result of the working of these forces numerous expeditions were taken out in explorations. Many of them were highly successful. In 1486, Diaz, a Portuguese, rounded the Cape of Good Hope. In 1498, another Portuguese Vasco da Gama landed in India and thus found out an entire sea-route to the Eastern countries. By about the same time, Columbus crossed the Atlantic and stumbled upon the West Indies. John and Henry Cabot explored the coast of North America for England. In 1499, Americans Vesputius explored Central America. Between 1519 and 1522, Hernando Cortez conquered Mexico for Spain and switched on the momentous flow of precious metals from the new lands to Europe.

These explorations and the following sea-trading were further helped by the progress in the technique of navigation. By the end of the 15th century, the sailing ship had replaced the old rowing galley and the art of tacking against the wind had also been learnt. Improved map of seas were prepared by Mercater and others. Navigation was further helped by the invention of the compass, the quadrant, the telescope and the chronometer.

Features of Commercial Expansion

The discovery of unknown lands and the sea-route to the East had important consequences for the development of commerce. The new sea-routes were of course, extremely risky due to the hazards of the imperfect seas and the prevalence of pirates. But they gave the much needed mobility to bulky goods which could hardly be transported by the land route. The ships could now transport such commodities as precious metals, ivory, furs, timber, spices, textiles, tea, coffee, sugar, wines, vegetables, tobacco, carpets, rugs, furniture etc. And the sea, transport was superior to land transport in respect of carrying capacity, convenience of loading and unloading and saving of time. The cost of transport was consequently reduced; and trade with the Eastern countries and colonies increased enormously.

Secondly, the discovery of the sea-route brought about an important shift in the importance of nations. When the land route was being used, the Mediterranean countries had obviously an advantage over Western European countries, in respect of trade. With the discovery of the Atlantic sea-route, however, the countries opening on the Atlantic came to occupy a more important position. They came to occupy a more important position. The trade along the land route declined and so did the old trading countries of the Mediterranean. With the new route, new trading countries like England, Holland, Spain, France and Portugal came to the forefront.

Thirdly, the discovery of rich gold and silver mines in America started a substantial and continuous flow of these metals to Europe. They went in circulation as money; and it is believed as a conservative estimate that the coinage in Europe increased twentyfold during the 16th century. One of the major consequences of this

rise in the stock of money was that it gave a spurt to prices of goods. Conclusive statistics are not available, but in general it is estimated that prices rose by more than 150%. Another effect of the increase in coinage was that a greater quantity of working capital became available for trade and helped, the undertaking of large-scale trading. Similarly, credit facilities also could be expanded on the basis of the increased quantity of money. It will be easily seen that but for the increase in the stock of money, the expansion of commerce might have been nearly impossible.

Fourthly, the expansion of trade and the increase in the quantity of money led to revolutionary development in Money market and Exchanges. For large-scale commerce, individual merchant's capital was no longer sufficient. Hence, arose the system of joint-stock business where more than one merchants pooled their resources. Similarly, the need for large-scale borrowing led to the emergence of banking institutions based once again on joint stock principle. Moreover, the large-scale international commerce gave rise to markets where goods came to be passed from merchants to merchants not for being taken to actual customers but to serve as a basis of speculation. Antwerp, in Holland, developed as a premier trade centre; and the Antwerp Bourse or Stock Exchange was founded in 1531. This first Bourse is the forerunner of modern stock Exchange market and hence is regarded as "an event of the first order in the history of European capitalism." The modern type of dealing in paper scripts appeared first in London in 1698.

The Antwerp market developed another modern aspect of the financial market viz the insurance activity. In those times, especially, sea trading was risky and methods came to be evolved by which some merchants on the market undertook to bear the risk of the voyage on sea, in return for some compensatory payment. Such insurance schemes were primarily evol-

ved for marine risk, but were applied also to fire, and life insurance for particular voyages.

The Trading Company

Another important feature of the commercial expansion was the growth of the trading company. As the scale of trading became bigger, the individual merchant, with his limited capital ceased to be the best agency of trade. The overseas trading had to be done with too much of risk on the voyage, for a single merchant to bear. The foreign country too was not a suitable place for an individual alien person to dabble into. The individual merchant, therefore, came to be replaced by a trading company of several merchants. Many of them collected their stock as capital for any one voyage, undertook the risk collectively and also distributed the profits or losses among themselves. From this joint effort of pooling the stock of capital, emerged the present joint-stock company. Of course, the earlier form differed from its present form in many respects. In the earlier period, each voyage was considered to be a separate enterprise; and profit or loss was distributed among the participants for that particular voyage. Later on, however, as the company's permanent establishment in home and foreign countries came to be large, the business of the company was treated as a whole and all members of the company were required to bear their appropriate shares.

In England, various companies were formed since the end of the 16th century for trading with different parts of the world. The Merchant Adventurer was one of the earliest, that handled the Baltic trade. For the same trade, the East Land Company was formed in 1579. The Muscovy Co. formed in 1553 was trading with Russia. The East India Co. chartered in 1600 traded with India and other Asiatic countries. The Levant Co. was formed in 1587 to trade with Turkey

and the Mediterranean countries. The Hudson Bay Co. (1690) traded with Canada.

One of the interesting features of these companies was their monopolistic character. When any company was legally chartered for trading in a particular area, it acquired the monopoly of trade. No body, not belonging to the company, was allowed to trade in the company's area. This monopolistic character was then preferred for many reasons. In the first place, the State policy was such as to increase exports as far as possible and decrease the imports of goods. The aim was that gold should flow into the country in lieu of the export balance. It is easy to see that such a State policy could be best carried out if there was an authentic body that was responsible for the trade. Moreover, the companies had to make elaborate arrangements to defend themselves on seas and in foreign lands. They therefore, had to incur heavy expenditure on defence preparations. In view of this, the state gave them monopolistic rights.

The trading companies thrived in the 15th century but from the middle of the 18th century they seemed to have played out their racket. By then, trade relations with foreign countries and colonies were firmly established. The risk on voyage had been substantially eliminated. The foreign rival companies were driven out of field when England overpowered her competitors—Spain, Portugal, Holland and France in turn. The State policy too, in regard to export balance had changed. It was no more considered to be necessary to amass gold from out of foreign trade. The company form of trading was, therefore, discarded in favour of free and open trading for all.

A few words more must be said about the East India Co. It was chartered in 1600. In 1657, it was turned into a permanent joint-stock company. Till then, each voyage was separately assessed. Since the

middle of the 18th century, the company came to acquire political power in India. For a long time, thereafter, the company was engaged both in commercial and political activities in India. Since 1774, the British Government began to control the political activities of the Company. Its commercial activities too was subjected to control. The company lost its monopoly of trade in 1813; and from 1833, its commercial activity was wound up. After the Rebellion of 1857 in India, the political power too was taken over by the Crown and the company was dissolved in 1857.

Effects of Commercial Expansion

Certain effects of the commercial expansion may now be specifically noted. One of the important economic results was that commercial expansion established wide markets for certain commodities and thus enabled them to be produced on a large scale. Without big markets that can purchase a commodity on a large-scale, large-scale production becomes impossible. It is obviously foolish to produce a big supply of goods, which cannot be absorbed by the market demand. That was precisely why, production before commercial expansion was necessarily on a small scale, catering mainly to a small local market. The commercial expansion, however, widened the market and created conditions in which large-scale production could thrive. The producers saw, further, that large-scale production mostly became more economic when a machine was employed. It was out of this tendency towards larger production, that machinery came to be invented and used on an extensive scale; and the Industrial Revolution was born. The commercial expansion, or revolution, therefore, must be looked upon as a necessary and preceding stage in the development of economy. Without commercial expansion, markets would not have widened and large-scale production

and consequent Industrial Revolution would have been impossible.

Commercial expansion also helped Industrial Revolution by amassing capital with certain countries and adapting the financial machinery of banks, insurance, and Stock Exchange for large-scale transactions. The Industrial Revolution, involving large-scale production, and large-scale finance, and trading, would evidently have failed, had not commercial expansion ripened the commodity market and financial market for large-scale transactions.

The social effects also were striking. Commercial expansion enabled the economy to expand and support more people, than formerly. Population, therefore, which generally tends to increase to the maximum that can be kept alive, on the available supply of necessities, increased during this period of commercial expansion. The Industrial Revolution expanded the economy still further and enabled further growth of population. That is why the Industrial Revolution is marked by a striking growth of population. But it is necessary to state here that the growth of population really began with commercial expansion, and later on was accelerated by the Industrial Revolution.

Commercial expansion also caused population to concentrate in commercial centres which swelled into big towns. The rise of these towns too was a forerunner of the rise of later industrial towns. Another effect was that commercial expansion promoted migration of European population to colonies and-conquered territories, and thus led the foundation of future economic Empires of industrially advanced countries.

Commercial expansion, further, enriched the merchant class and gave it a new status in the eyes of kings, who were always in need of money. It is interesting to note that, in the political field, concession after concession was bought by English merchant

class from their always needy kings. Starting from 'Magna Carta' almost every major democratic concession in this period was ceded by the English kings as a price for the rising merchants' financial help.

THE COMMERCIAL REVOLUTION IN MODERN TIMES

Effects of Transport Development

Effects of Transport Development, the development of rapid and efficient means of transportation brought about a revolution in commerce. When transportation was extremely difficult, bulky goods could not naturally be moved and trade was restricted to precious goods. In their case alone profit in trade made transportation expenses and risk worthwhile. The development of the means of transport, however, changed the entire aspect. Bulkier goods like coal, iron, cotton, grains etc. could now be cheaply moved. The effect was that the market for these goods widened to a very large extent. Without the easy means of transport, the market for these commodities was only local. With the development of internal means of transport like goods, roads, canals and railways, it widened and became a national market. And with the development of steamships on ocean, it extended to cover the entire globe. That is how in modern times, the markets of such universally required commodities like tea, coffee, tobacco, cotton, coal, wheat, and iron have become worldwide markets. This tendency was also helped by the fact that these commodities could be standardised in respect of quality, gradations, and quantitative measures. It became possible, therefore, for a Japanese Cotton Mill to buy Indian cotton through its agent according to predetermined standards. Upto 1870, though the means of transport

were cheap and efficient, they were not fast enough to carry perishable articles like milk, eggs, meat, vegetables etc. from one country to another. But since, then, the fast steamship on sea and fast railways and later automobiles on land have solved the problem. The invention of refrigeration arrangements on ships and railways further helped the transport of perishable goods.

The consequences of these changes were vitally important. As grains, and even perishable articles could now be imported, with regularity and certainty some countries like England and Germany came to depend on foreign countries for their food requirements, and to transfer to other manufacturing activities, the land, labour, and capital which otherwise they might have been required to employ in the production of food. England's imports, therefore, could consist of mainly agricultural goods and exports of manufactured goods. It is easy to see that without the development of the means of international commerce, this could not have been possible. Moreover, due to this extended division of production between countries, the internal trade of all nations increased tremendously. The foreign commerce of U. K. increased from 656 million sterling in 1874-75 to 1186 million sterling in 1913 and to 1458 million sterling in 1937. Similarly, Germany's foreign trade trebled during 1874 and 1913. It will also be noted that the possibility of transporting raw materials over long distance—internally or internationally—alone made possible the development of large-scale production. Because large-scale production requires raw-materials on a large-scale and selling of finished goods too on a large-scale; and this is not usually possible unless raw materials are collected from a wide area and finished goods are disposed of on a wide market. Other consequences of extended and rapid transport were that speed gave regularity and safety

to commerce. Slow moving transport on land or sea was a tempting prey to dacoits and pirates. The fast moving transport, of commerce aided with certain other factors, made piracy increasingly difficult and costly. Incidentally it may also be noted that the new mobility which food-stuffs acquired abolished the threat of starvation and famine in every part of the world. Famines in certain areas are in nature always balanced by abundance in other areas. Now that food could be moved cheaply, easily and on a large-scale, scarcities and abundance in different areas could be levelled out. Failures of crops in any localities, therefore, do not mean starvation for the people in modern times.

The progressive development of transport both on land and sea has also been the cause of changes in trade routes. Before the 15th century land transport was less risky than sea transport and hence land routes of trade were more important than sea-routes. Trade between Asiatic countries and European countries was mostly carried by way of land across the Middle East and Mediterranean countries. With the discovery of the mariner's compass, and progress in ship-building, seamen ventured out on sea and found out sea routes between Eastern and Western countries. Sea-transport now became easier and cheaper than land transport and the trade routes changed. Ports, that dotted the sea routes became commercial centres e.g. Amsterdam, Antwerp, London, Genoa, Venice etc. With the development of railway transport, once again, land routes became equally efficient and commercial centres ceased to be necessarily ports, as formerly. The commercial importance of centres like Moscow, Warsaw, Berlin, Lyons, Chicago etc., is in no small measure due to land transport that can now radiate from them.

Features of Modern Commerce

The expansion of commerce produced consequences of varried character. One of them was the specia-

rise and upset the cost calculations of the producer, therefore, he likes to shelve the risk on to somebody else, even at a reasonable price, if that is possible. The speculator or dealer in 'future' becomes useful. He undertakes to sell the commodity to the producer at a certain predetermined future date at a certain price. He does so, of course, in the belief, that the actual market price of the commodity at the future date will be lower than what he has contracted for, and he will be able to make a profit in the transaction. If his expectation actually comes true, the speculator gains. If his calculation goes wrong, he is liable to suffer a loss. The purchaser of the raw materials also gains by the fact, that the future price of his raw materials is fixed for him and he can proceed with his productive activity on that basis. For this guarantee of price, the purchaser does pay a slightly higher price. In fact it may be regarded as an insurance charge against the risk of price-fluctuations. Sometimes, the guarantor does not actually sell the agreed goods to the purchaser at all but enables him to buy them from elsewhere at the current prices. He only pays the difference between the actual ruling price and the contracted price, if the latter is lower than the former and receives the difference from the purchaser in the contrary case.

The increase in the scale of trading has produced specialisation in another respect also. Formerly when goods produced were sold locally, the producer directly met the consumer on the weekly or fair market. There was, therefore, no need of any intermediary agency that could bring them together. When the goods were brought from distant places, the merchant bought them at his risk at one place and sold them at another. In modern market, however, producers can not directly meet the consumers. The large-volume of trade, and the vast distance between producers and consumers makes this impossible. Therefore, a whole

army of middlemen has come into existence to link them and to convey goods from producers to distant consumers. Brokers, agents, travelling agents, carriers, wholesalers, retailers are some of them. From small local markets in the producing area, the goods are collected by agents of big wholesale merchants and brought to the main produce markets. Brokers bring together sellers and buyers. Other big wholesale merchants buy the stocks, store them and sell them to the retail dealers over wide areas. The retailers, in turn, sell them to the actual consumers. The price of the goods inevitably increases due to the charges made on them, of the commissions allowed to these various middlemen. It is estimated in America that often times, the price increases by 200%, since the goods leave the hands of actual producers. This is certainly a high cost of distribution; but the scale of commerce and distance involved make it inevitable. The volume of commercial activity may also be gauged by the fact that in England, before 1939 as big a proportion as one fifth of the total working population was engaged in commercial activity.

Once again, due to the volume of trade and distance involved, a good deal of time elapses between when the goods leave the hands of producers and reach the hands of consumers. Somebody, therefore, is required to invest money capital and hold the goods during this time. They are required to be stored also, if necessary. The wholeseller is the person who undertakes this task. The insurance companies help him by lifting the risk of damage to the goods off his shoulders and the commercial banks finance him, on the security of the goods.

The rise of the small shopkeeper is a remarkable characteristic of the modern commerce. There were no retail shops formerly when producers themselves sold the goods to consumers in weekly markets. In modern commerce, however, retail shopkeepers are

required to bring the goods stocked by the wholesalers to the places within the easy reach of consumers and to sell the goods as and when required by them. Retail shopkeeping becomes thus a specialised business in itself, as distinguished from wholeselling. And even in retailing, specialization has been further advanced. Retailers now sell particular types and classes of goods. Two more developments in retail commerce that deserve mention here are the departmental store and the multiple or chain store. The departmental store takes a step against specialization; and brings under one roof all sorts of goods. "The universal provider type shops" says Birnie, "occupy palatial buildings, include hundreds of departments and cater for a wide and varied range of wants." But their main business is the selling of drapery and millinery, and their chief customers are women. The multiple or chain shops on the other hand are small establishments scattered over wide areas but organised and managed by a single business concern. They represent concentration of capital, unaccompanied by an enlargement in the unit of retail trading. The departmental stores and multiple stores have obvious advantages over the small retailers, arising from the large-scale of operation; In advanced countries like the U. S. A. and England, the small shops were actually threatened out of existence at the beginning of the 20th century. Yet they have survived still even in those countries. The reasons for their survival are that they are within easier reach of customers, that they can pay individual attention to the customer and can afford to give credit facilities on the basis of acquaintance.

The modern methods of commerce have increased the facility to the consumer. The retail shops, from which the consumer buys, are open for business everyday and the consumer, therefore, is relieved of making his purchases in season and of storing his requirements. The wholeseller and retailer now

store the goods for him and make them available in such quantities and at such times as are suitable to the consumers. Further, he can make his purchases even without going to the shops, if it pleases him. The retailers 'post' him about the nature of goods and the consumer can give his 'orders' either by mail or phone. The goods then are delivered to him at his home. Sometimes, he is even allowed to buy costly goods on instalment basis. If the consumer is not in a position to pay for the goods at once, the retailer might agree to accept the payment in suitable instalment. Of course, the facilities given to the consumers differ in different countries and at different places in the same country. The degree of advance in commercial methods, the volume of trade and the competition between the sellers are significant factors in this connection.

It will be seen that in modern commerce the consumer is separated from the produce by tiers of middlemen and miles of distances. Yet connection between the producer and consumer is essential for the progress of production. The traders and consumers must be informed of the goods produced, and the information is given by means of circulars, pamphlets, catalogues and advertisement in press, cinemas and radios or by posters, show windows etc.

CHAPTER XI

THE REVOLUTION IN TRANSPORT

Sec. I. The Roads

Throughout the middle ages, the state of roads was extremely unsatisfactory in the major countries. The Roman art of making smooth and hard roads was forgotten in Europe, except in France and Italy. In other countries, there never probably developed any art of good road making. The roads were mere earthen ways. They were not made out of any special hard material. The art of using stones and sand was yet to be discovered in England by Telford and Macadam. The earthen roads naturally could not stand the strain of wheeled traffic, which ploughed deep ruts into them. When they became wet due to rain or snow, they turned into muddy quagmires. The mud collected into ruts and wheels got struck up into them. There were no bridges over streams, and the roads were liable to be cut off when water flowed over them. Even when dry, the roads allowed traffic only at a slow rate and in short stages, because only a little travel in any wheeled conveyance was sufficient to shake the bones of travellers. The travel, therefore, was tedious and exerting. Besides, the roads were infested by robbers and slow moving traffic was a tempting prey. It was not without significance that travellers made their wills, before starting on a journey.

In England, the case of roads was entrusted to parishes. By a law of 1555 each parish was made responsible for the upkeep of roads passing through it.

Governments for the movement of their armies. The East India Co. too paid some attention to the roads mainly out of military motives; though in this case, the Company's economic interests as a trading company were a contributing cause.

The Development of Roads

The English overseas trade was expanding since the 15th century and the expansion was bound to stimulate the development of internal trade. Due to the influx of precious metals, the prices of goods were rising. The old restrictions of the gilds were slackening. The conditions in England, were ripe for the development of internal commerce. It was not possible, therefore, that English roads could remain in the same old unsatisfactory condition; and the road development started with the 17th century. It started first in England, of all countries, because the above mentioned factors which stimulated it, became operative first in England.

The chief agency of the development came to be the turnpike system. It came in vogue in the 17th century and became very popular in the second half of the 18th century. Under this system, a private business was started to make and maintain an important road. Tolls were collected from traffic passing along the road. Out of the tolls collected a part was spent on the repair of the road and the rest was appropriated as profit by the business concern. An Act of Parliament was necessary for the institution of such turnpike businesses or trusts as they were called; and in all more than a thousand trusts were so created. In 1820, out of an estimated total of 125000 miles, about 20000 miles of roads were under the turnpikes.

Evidently in the turnpike system, the burden of the maintenance of roads was wholly to be borne by the users of the roads. The government did not then bear

any burden, as the policy of Government then prevailing was not to interfere or help the internal economic development. Under those conditions, therefore, the turnpike system proved very useful. Its chief advantage was that in absence of Government care, there came to be at least somebody who was interested in the maintenance of the road, may be in his own private interest. Its drawbacks, however, were that only some important and profitable sections of roads alone were cared for by the turnpikes, that the traffic was handicapped by the many tolls, and that due to multiplicity of road authorities, roads differed in quality and upkeep.

The turnpike system was copied in the U.S.A. but not in any other major country. In France and Germany, its absence was understandable; because in those countries roads were cared for by the State itself, and no private system like the turnpike trust was necessary. In India, however, one could have expected the emergency of the turnpike trusts, especially, because India used to copy most of English economic institutions; and also because the Indian Government itself did not provide much attention to roads. The explanation of the absence of turnpike trusts in India seems to be, that by the time India needed the development of the means of transport, the railway age had already begun and once the railways were constructed, no turnpike trusts for roads were deemed worthwhile.

The alternate agency of road development in place of the turnpike system, was the government effort itself, and it was fully operative in France and Germany. In the U.S.A. also, though there came to be some development due to turnpike trusts, they proved unequal to solve a peculiar American problem. Colonization was moving Westward. New regions in the West of the U.S.A. were being explored and set-

tled; and more than 50,000 emigrants left the Eastern part every year for going to the West. There was, however, not one good road from East to West which the settlers could use. Trade was not possible and even communication was difficult. The Government too experienced much difficulty in the administration of the Western regions. A trans-continental road—the Cumberland road—was, therefore, planned and constructed by the States and Federal Governments in the beginning of the 19th century. Since then the Government spent a lot of money on roads in America, until the railways forced their attention from off the roads. In India also roads have been a care of government, until the middle of the 19th century, they were practically neglected but Lord Dalhousie then gave some fillip to road construction. Since then the development has been proceeding according to the enthusiasm and financial convenience of the government at different periods. In 1900, there were only 37,000 miles of good roads and 136,000 of unmetalled roads for the whole of the country.

The Technique of Road-Making

The technical side of road making came to be revolutionised in England in the early part of the 19th century. The credit for it goes mainly to the efforts of Metcalfe, Telford and Macadam. Metcalfe and Telford improved the technique of surveying, the laying of the roads, their drainage etc. Macadam found out the road metal. On solid stony foundations, he laid small fragments of granite, bound together by water and sand. The whole thing was made hard by heavy rolling. The camber of roads too was improved. Earlier roads slopped steeply to the sides in order to allow water to wash off. But this meant that wheeled traffic chose for comfort only the middle part of the road, with consequent heavy wear. On macadamised roads, however, the camber was only slight, thus mak-

ing the traffic spread uniformly over the entire surface of the road. As a result of the technical improvement, the speed and comfort of travel was enormously increased and the era of stage coach was ushered in. Between London and Edinburgh, the journey was cut down from 14 days to 48 hours.

The improved technique was copied by other countries too and it answered the needs of the 19th century traffic. In the 20th century, however, the motor car came on the scene and the technique of road making needed further improvement. New methods, therefore, came to be evolved, especially based on cement concrete, tar spraying etc.

The roads were important until the thirties of the last century. With the advent of the railways, however, they faded in their economic significance. The main traffic turned away from them, and they stayed only as feeders to the railways. The old private enterprise in the form of turnpikes could no longer survive and gradually the State, in all countries, took over the responsibility of maintaining and developing the roads. In the 20th century, the roads have once again come in to their own, thanks to the introduction of the automobile and the needs of the mechanised armies. Private enterprise, however, has not been revived any where and they have remained a responsibility of the state in all countries.

Sec. II. The Canals

The art of canal building is not an art and of modern times. It was well developed by Dutch and Italian Engineers in the later Middle Ages, and was also successfully practised later by the French. Before the modern age, Holland had already an excellent net work of canals and the French canals of Languedoc and Picardy showed French engineering skill at its best. The canals were scores of miles long and crossed mountains in tunnels.

Development Of English Canal

In England, however, the art of canal making was almost unknown and Englishmen marvelled at the engineering feats of one of their geniuses—Brindlay, though his works were small in comparison with what the French and Dutch had already accomplished. Yet it is true that it was in England that the era of canal building began, which can be called a reflection of the Industrial Revolution. This is natural enough, because it was in England that economic forces were ripe to burst forth in Industrial Revolution by 1750. Trade was developing and a need was felt of being able to move bulky goods like coal, clay, food, etc. Coal was required by iron furnaces and also for households. Its demand was to increase with the use of steam engine for factories. New towns that were springing up and were to develop, were in need of food being brought to them from distant farms. China-clay found in Cornwall was needed by the pottery industry of Wedgwood. It was necessary, therefore, that for the uninterrupted progress of economic activity in England, canals, if not the roads, should develop as easy means of transport.

The English canals were developed by the same agency that developed practically all branches of English economy viz. private enterprise. Canal digging was undertaken as a private enterprise and financed by individuals or companies in expectation of profit. Only the permission of the Parliament had to be taken by an Act which enabled the canal Companies to acquire land compulsorily. Revenue from canals was secured through tolls levied on those who made use of the canals. In short, canal companies just corresponded to turnpike on roads and behaved exactly the same way. Just as turnpike Trusts only afforded means of transport for those who needed them, canal companies too made canals for those who needed and paid for the use. They did not become carriers of

goods themselves. This was to cost them dearly when railway companies later provided not only the rail track to users but also became carriers of goods themselves. The private enterprise and multiplicity of companies also developed some defects such as differences in depth and width, tolls, upkeep etc.

The history of English canals falls in two periods; one from 1760 to 1830 when the canals grew and prospered; the other from 1830 onwards they decayed in competition with the railways. The first English canal was built in 1761 by the Duke of Bridgewater, from his collieries at Worsley to Manchester—a distance of seven miles. The Engineering genius behind the scheme Brindlay, who though untrained, was capable of solving all practical problems like water-proofing of canal sides and bed, tunneling bridging etc. Since then canal building progressed rapidly and developed into a sort of canal-mania by the nineties. It left many of the canal companies in financial difficulty and England with a good network of canals of about 4000 miles.

The economic good that the canals brought to England was immediately evident. The cost of transportation was radically cut down. In 1770, from Leeds to Liverpool carriage of one ton of load by road cost £ 4-10 s. while by canal, the cost was reduced to only 16s. In other cases, the reduction effected might have been less spectacular; yet it is true that canals in general reduced the cost of transportation by at least 25%. Due to canals, bulky goods like iron ore, coal, clay, food etc. got new mobility. As coal could be shipped through canals, towns and industries could move away from forests and coal fields. Ports like Liverpool got an accessible hinterland from which they could draw supplies for export and to which they sent the imports. Thanks to the canals, food could be brought to any big town from distant farms; and market for agricultural goods widened. A new class of Engineers and mobile

workers arose and came useful in the construction for railways.

The Decline of Canals

From 1830, the canals felt on evil ways due to the competition of the railways. In all countries, the railways have superceded canals due to their inherent advantages over the canals. They lay in the fact that railways were speedier than canal navigation; they could be taken anywhere near the mouths of pits of coal; they offered terminal facilities of loading and unloading, collection and distribution of goods; the railway companies were carriers of goods themselves, and hence goods, which were not enough to fill a barge on a canal could be better sent by the railways; the haulage of goods from railways to ocean going steamers was easier than that from canal barges. In addition to these inherent drawbacks, the canals in England suffered also from other defects. Nearly $1\frac{1}{3}$ of the canals were bought by the railway companies with a view to eliminate opposition of vested interests in Parliament and also to eliminate competition from canals. The canal companies too, did not show much enterprise in adapting themselves to the new situation. They did not take up carrying of goods, even in imitation of the railways. They did not amalgamate or co-operate with one another in standardising their services and arranging for through haulage of goods over the entire canal system. Though some of the canals were wide and deep enough to take barges up to 90 tons, many of them were small and could accomodate only barges of 20 tons. The canals were primarily built for slow moving barges and their shares were incapable of sustaining the wash of fast moving steamers. The combined effect, therefore, was that the railways, when they came, stole away most of the traffic from canals.

The same history of the growth and the decay of

canals was repeated in almost all other countries with only a few deviations. In France and Germany, once again, the State itself undertook to build and maintain canals. In the U. S. A. canals were built both by private and State enterprise. India has no canal history, because navigation canals have been rarely constructed at all. There have been only two important navigation canals in India; the one, Ganges canal connecting Haradwar and Cawnpore; and the other Buckingham canal in Madrás. Once again, the main reason why canals were not developed in India is that by the time, economic and political conditions were not suitable for canal construction. Railways had already been in the field.

Like England, the canals in the U. S. A. decayed in face of competition from the railways. In France and Germany, however, they have been kept up at State expense, irrespective of their competitively untenable position.

Sec. III The Railways

The development of transport under the Industrial Revolution evolved through roads and canals and reached its fruition in the railways, at least so far as the 19th century was concerned. It was a brand new gift of the Industrial Revolution; and naturally epitomised the characteristics of the Revolution. The track and rolling stock were made of iron and steel, and the motive power was provided by steam. In point of speed—the hall mark of the modern economy system, it far surpassed the older modes of transport and was better adapted to the haulage of goods produced on a large scale. Being a product of Industrial Revolution, it was also natural that the new form of transport was born in England, the cradle of Industrial Revolution.

In the construction of railways, the various nations displayed their characteristic policies. In England the

railway construction was entirely left to private enterprise. The Parliament contented itself by enabling the railways to get the necessary land. The entire cost of construction was to be borne by the railway companies themselves and the whole enterprise was undertaken at the company's risk. In other countries, however, the State adopted a more helpful attitude. In France and Germany, the State itself undertook much of the railway construction and where private enterprise was allowed, it helped generously by giving land free and subscribing a part of the capital. In the U. S. A. also, the State helped by giving land free to the companies; but the construction itself was left to private enterprise.

In India, the railway development reflected the political situation in the country. The country was ruled by an alien Government which wanted the railways to open it up for British trade and to strengthen its military hold on it. The railways, therefore, were necessary for the ruling power, if not for the country's economic interests. British capital and enterprise was invited, therefore, in the fifties of the last century at very onerous terms for India's exchequer. The Government of India provided land free of cost and also guaranteed on capital a rate of interest between 4% to 5%. In return, the railway companies, chartered in England, and financed by English capital, were liable to be purchased by the Government of India after the expiry of a contracted period. They also offered to share surplus profits (above the guaranteed rate of interest) if any with the Government the profits, however, never materialised, and Government suffered heavily in making good the deficit. The guarantee of interest lulled the companies into waste, and the fact that a Board of Directors domiciled in England was at the helm of affairs necessarily brought with it inefficiency and lack of initiative and enterprise.

The Policy was changed in 1879, and the State itself undertook the construction of railways. It could

raise loans for rates of interest not exceeding 4% and the financial burden, therefore, was lightened. Yet the policy was given up by 1880, as the difficulties of the Government budget in that period seemed to check further development. Once again, therefore, from 1880, private enterprise with State aid was encouraged, though this time with less onerous terms for the Government.

Meanwhile, the contracts with earlier companies expired and the Government followed the policy of buying up the lines from 1880. The management, however, was not immediately transferred; and under new contracts, the old companies were allowed to continue, in the management. In Indian States, the States built the railways but often entrusted the management to private companies operating in the near British areas. Thus a complicated system arose. Some lines were State owned and State managed, others were state owned and Company managed, still others were owned and managed by private companies themselves. In 1900 there were no less than 30 separate railway administrative bodies working in India. In all cases, however, the Government had control on operation, rates, facilities etc.

State Control Over Railways

But whatever the system of ownership and method of construction, the State in all countries gradually came to exercise control over the management of the railways. In countries where the State itself owned the railways or participated in their construction, it was natural that the State should assume control over management too: But even in England and U.S.A., where construction was left entirely to private enterprise, the State came to control the railways in course of time. The following brief account of the expanding control of railways by the State in England will illustrate as to why such control was deemed neces-

sary. In 1840, the Board of Trade was empowered to inspect new lines so as to avoid unnecessary and unjustified construction. In 1842, it was entitled to hold inquiries into accidents. The profits of the companies came to be limited, on the ground that the railways had a monopolistic advantage and that they benefited from the general economic development. The Government was also allowed to purchase new railway lines, because the State now realised the supreme economic importance of the railways in the economy of the country. In 1846, uniformity of gauge was enforced on all lines, except the Great Western railway. The reason was that without uniform gauge, through haulage of goods was not possible over different lines. From 1850 to 1888, Parliament was engaged in checking discriminating preferences given by the railway companies to their customers. Such preferences were harmful because they destroyed the competition between the favoured and non-favoured customers, and thus helped the favoured one to monopolistic power. This evil potency of the railways was more strikingly demonstrated in the U.S.A., where a railway company through its preferences materially helped the Standard Oil Company to oust its rivals from the market. From 1880 onwards, the British Parliament appointed Commissioners to determine the maximum rates to be charged by the railways. Such a control became necessary, because by their very nature the railways came to have a monopolistic position regarding the railway traffic in their region and unless their monopolistic power was curbed by control on rates they charged, they were likely to exploit their position to the detriment of the public interest. The British Parliament had also to intervene for preventing the amalgamations of the railway companies. This became necessary because amalgamations tended to increase the monopolistic power of the railways.

It will be clear from the above account, how the

British railways began as uncontrolled private enterprise, but gradually their freedom was weaned away by the State in the interests of the public. It will also be seen that for the reasons stated above, the railways in any country are bound to invite the control of the Government. In the U.S.A. the railways are private concern, but there too, the State exercises similar control over them. In India, also, the railways were constructed and managed by private British companies. The Government of India, however, had always a hand in their management, by way of supervision.

Economic Consequences of Railways in India

The contribution of the railway to the development of Indian economy may now be specifically noted. The Indian railways had to open up the country for easy trade. In England, there was at least some road and canal transport system, before the advent of the railways. In India, however, the railways became the first internal system of efficient transport. As such, their contribution to the development of Indian economy is especially important. It is the railways which commercialised agriculture by enabling the products to be sent to distant and foreign markets. It is also the railways that have made India's coal and iron and steel industries possible. Unfortunately for India, these materials are found only in a narrow field in Eastern India and the only answer to the problem of distribution of these goods all over India was the railways, especially because, the country was not suitable for canal building and the use of automobile was to come only with the 20th century. As in other countries in India too, it is the railways that have enabled the development of modern large scale industry, the development of foreign trade etc.

The public opinion in India, however, has not conceded the credit without grudge or hesitation. The

criticism of the railways was of two types. Some criticism was justly levelled at the way in which the railways were administered. But another type of criticism questioned the very advisability of the railways for the Indian conditions. The first type blamed the Government for not striking a better bargain with the private companies, and for not undertaking the railway construction on State account. The inefficiency of the English Boards of Directors were justly criticised. Even the Acworth Committee appointed in 1921 to inquire into Railway administration was unanimous in condemning the management through companies domiciled in Great Britain. Other aspects that came in for public criticism were the disregard of the railways for public comfort and convenience, the lack of funds to be provided by Government for renewal and extension of railways, the paralysis of administration resulting from dual control of the Government bureaucracy and the Companies, the foreign staff of the railways, the partiality of railway management in favour of foreign trade and foreign customers etc.

The other type of criticism concentrated on the fact that the railways led to the decay of old Indian handicraft industry by exposing it to the competition from foreign machine-made goods. It was argued that before the railways, the Indian economy had stability and balance. The village industries catered for the needs of villages, and whatever trade was possible was sufficient to encourage the urban skilled crafts. In this peaceful economic atmosphere, the railways dumped foreign goods. The indigenous industries were killed in face of competition from cheap machine made foreign goods. The destruction of industries created unemployment and increased the burden on agriculture; the balance and stability of the economy was thus lost. The industrial section suffered grievous damage and the agricultural section was overcrowded. The argument, no doubt, holds some water. It must

be admitted that the railways did expose native industry to the competition from foreign industry, in an unprecedented measure. It may, however, be also noted that decay of old industry in face of machine industry is not a feature peculiar to the economic transition in India. The problem arose in every old country and had to be accepted as a price of transition. In fact, it is also pointed out that the Indian handicraft industries were suffering from foreign competition even before the railway age in India. And, moreover, it is also true that if the railways hastened the decay of old industries they made possible the rise of new industry in India.

Another plank of criticism is that the capital invested in railways could have been better utilised in the construction of irrigation works, that might have increased the agricultural productivity. In the 19th century there was paucity of capital in India; and there was a limit to which India could borrow from abroad. Capital thus was not sufficient for both railway construction and irrigation. It was argued therefore, that the available sources of capital ought to have been employed in works like irrigation, which would have increased the productive efficiency of India. Instead the Government spent on railways, and developed a kind of trade which was detrimental to the interests of the Indian industry.

Sec. IV. Shipping

While roads, railways and canals compete for the internal traffic within a country, the ocean going shipping stands in a separate class as carrier of ocean trade. Up till the second world war at least, it was unrivalled. Only recently the rival has indeed appeared in the form of the aircraft. Yet for the period of our study, the aircraft has to be left out of consideration.

Technical Development

The development of the modern steam and steel shipping combines in itself both the Commercial and Industrial Revolutions. Development of shipping is impossible unless there are goods to be carried, and the use of steel and steam which characterise modern shipping does presuppose an industrial structure that would easily make both available. It is natural, therefore, that the modern shipping should develop foremost in England, the pioneer in both Commercial and Industrial Revolutions.

The major technical changes in shipping came to be adopted only after 1880. The early inventions concentrated on the motive power of the ship. As early as 1802, steam was used by Symington as a motive power to drive a ship—the *Charlotte Dundas*. In 1807, the ‘*Clermont*’ designed by Fulton in America ran on the Hudson from New York to Albany. Soon after, technical improvement enabled the steamship to venture out on the sea; and in 1819, the first steam ship crossed the Atlantic though for a greater part of her journey she had to use sails. Only in 1833, a ship crossed the Atlantic on the power of steam alone. The early steam ships were fitted with sails also, because the marine engine then had not well developed and besides the rate of consumption of coal by the steam engines was so enormous that ships could not store enough coal. The ships meant for long voyages, therefore, preferred to have an additional string to their bow. Besides, though steam gave speed to the journey, it was costly; while the wind power for the sailing ship was available free. Upto 1870, therefore, sailing ships had the advantage over steam ships and the worlds’ merchant shipping consisted mostly of sailing ships.

The advantage, however, was lost in the last quarter of the 19th century. The Suez Canal was opened

in 1867 and as it could be used only by steam ships, the sailing ships were put to a disadvantage. Besides, both the rates of coal consumption and the necessity of carrying coal were reduced by technical progress. Coaling stations came to be established in all parts of the world and the ships were relieved of the necessity of carrying their own coal for the entire journey. Improvements in marine engines greatly reduced the rate of fuel consumption. The four cylinder engine was introduced in 1854 to be followed later by compound engine, triple expansion engine and quadruple expansion engine. In all these cases, successful attempts were made to reduce fuel consumption, to one-fourth of it than formerly was. The introduction of oil as fuel came later. Oil is less bulky than coal, and requires less storage space and also smaller numbers of crews for handling. Its use, however, is not common due to its high cost.

Changes occurred in the ship building material too. As early as 1785, Willkinson in England built an iron engine and in 1820 an iron ship to be worked by steam was built. The use of iron, however, was dependent in the progress of steam engine, as for sailing ship, wood was preferred to iron. Iron came to be used, therefore, only after 1850, and from 1870 it was replaced by steel, once steel making was rendered easy and cheap by the invention of Bessemer and Thomas Gilchrist in steel-making. Steel had an advantage over iron, in that it was more durable and also lighter than iron.

England's Superiority

Throughout the growth of shipping and progress of its technique, England has been far ahead of all countries. It fully deserved the title of the 'mistress of the sea' at least up to the first Great War. Holland, Spain and France were its early rivals, whom she disposed of by the end of 18th century. In the 19th cen-

tury, U.S.A. with its richest and inexhaustible sources of timber and facilities for ship building appeared as a serious rival; but before the rivalry could be overwhelming, its shipping was sapped by the civil war. The substitution of steel for wood too placed the U.S.A. at a disadvantage; because its iron and coal resources were not as suitably placed for ship building as England's.

Among the more specific reasons for the British pre-eminence in shipping, the following may be mentioned. Firstly, the growth of shipping is after all dependent on demand for it, and could not have been possible but for the gigantic growth of English trade. The growth of English industries led to an enormous export and import trade. The English economy did not develop towards a goal of self sufficiency. England depended on foreign imports for its food as well as for raw materials like cotton, for its industries. In exchange, it sent its manufactured goods to all other countries. Under the circumstances, therefore, the growth of English shipping was inevitable. Secondly, English shipping industry had both the tactical and technical superiority over ship building industries in other countries. The English industry had the advantage of being first in the field. It had the whole of British and colonial trade reserved for it. The main raw materials, timber, iron and coal were available to it in suitable places and in abundance. It had at its back, the mightiest industrial and financial structure in the world. It had at its disposal, the British engineering skill, seasoned for a long time. It was no wonder, therefore that British shipping developed into a big industry. Before 1890, the United Kingdom constructed about 80% of the World's shipping and owned about 60%. The magnitude of the industry brought to it further advantages of specialisation, greater division of labour and perfection of skill. A whole race of trained and highly skilled Engineers

came to grow out of the big industry and in turn sustained it. The achievements of British shipping industry are, therefore, spectacular. "Before the war, the twin industries of ship building and marine engineering employed together well over 200,000 work people; the capital invested was not less than £35 millions, and the annual out-put exceeded a gross selling value of £30 millions. The normal production before the war was greater than that of all foreign ship yards put together. At the outbreak of the war, the British mercantile marine was the largest, the most upto date and the most efficient of all merchant marines of the world. It comprised nearly one half of the world's steam tonnage (12.4 million tons out of about 26 million tons net) and was four times as large as its nearest and most formidable rival the German mercantile marine" (Knowles).

Throughout the 19th century, therefore, the position of British industry looked almost impregnable. Only after 1890 the competition of German merchant marine began to cause some anxiety. The growth of German shipping industry was due to the growth of Germany's iron and coal industries, the development of its foreign trade, and the positive financial help given by the German Government. The competition from this growing industry bade fair to be increasingly harmful, but the whole scene was changed with the ruin of German shipping during and after the War of 1914.

State Policies

Some note must be taken here specifically of the State policies towards their shipping industries, the shipping policy of the British Government has not been uniform. From as early as 1381 to 1822, the Government's policy had been one of fostering the industry by special legislation—the Navigation Acts.

The English kings had realised that the main defence of the nation was to be at sea, and that one ship more for trade was also one ship more for defence in war. Under the Navigation Acts, therefore, which clustered round about the middle of the 17th century, a reserved field was created for the growth of English shipping. The coastal trade was reserved for English ships. The trade between the mother country and the colonies was reserved for English or colonial ships. In the European trade, certain specified commodities could come only in English ships. Certain colonial products were required to be brought to England before being further sent up. With a view to encourage English ships on long voyages, they were forbidden to bring goods of non-European origin from European ports. Coffee, thus, could be brought from Brazil but not from Holland which does not grow it. The English ships were required to be built in England and manned and captained by English seamen.

The Navigation Acts, no doubt, helped both the English defence and English commerce. For these, and especially for the needs of an Empire, they were considered to be very essential. Even Adam Smith, who otherwise pleaded for non-intervention by the State in economic activity, justified the Navigation Acts as the most prudent measures on the part of the Government. It was feared that but for the Navigation Acts, the Dutch might have won the carrying trade even of England.

Whatever the justification of the Navigation Acts in the 17th and 18th centuries, they were not required in the 19th century. The superiority of English shipping industry was well established by then; and it was now capable of forging ahead of its rivals without Government help. We, therefore, find that minor relaxations in the Acts were allowed from 1796 and the Acts were repealed between 1849 and 1854. Since

then British shipping has been subject to very little Government control. Only after much public agitation led by Plimsell, a member of Parliament. Merchant Shipping Acts of 1875 and 1876 were passed with a view to provide for the safety of the ship, the cargo, the crew and the passengers. Almost all other countries also adopted similar policies towards their shipping.

The Indian shipping history makes a sorry tale. Before the advent of the British power in India, India had a fairly well developed shipping industry. For ages long, Indian ships have gone to foreign countries with men and material from India; and before India fell prey to the British conquest, Indian ships were capable of managing India's sea borne trade. They were fit to brave the rigours of high seas, and sailed even up to England. On coming to power, however, the British deliberately put down the Indian shipping industry. Since then India has practically no shipping industry. When shipping, elsewhere, was revolutionised by steel and steam, India lacked facilities for the production of both of these. In modern times, therefore, India has not only no shipping industry, but it is also not industrially advanced to have one. All her sea borne trade is carried by English and other foreign ships. There have never been any Navigation Laws to foster and protect India's shipping. Even the coast-wise trade, which in all other nations is reserved for national shipping, is in this case open to English shipping. It is no wonder, therefore, that India has no shipping history of her own in modern times.

CHAPTER XII

THE REVOLUTION IN TRANSPORT (Contd.)

Sec. I. Comparative Merits

Among the various means of transport, the roads were the first to develop. Their development began in the 17th century and reached its zenith between 1760-1774. The canal period began in 1760 and faded with the arrival of the railways in 1830. From hence, the railways dominated the field of internal transport. Their supremacy was unchallenged, until the beginning of the 20th century when the automobile bade fair to give them a hard time. It will be seen that this historical sequence of the emergence of the various forms of transport was the same in England and in all other countries.

The roads were the first to develop, because they were easily the most suited for the early means of transport, viz. the human labourer, the pack animal and the cart. Besides, roads could be made with comparatively less amount of capital and this was an important consideration when capital was yet to accumulate in huge proportions. The roads, however, were not suited for the transport of bulky goods like grains, clay, timber, coal, cotton etc. That was why—inland waterways were developed as soon as they became possible. Their construction, however required greater capital and more advanced technical skill. The canals therefore, came later than the roads. The development of railways had to wait till the thirties of the 19th century, for many reasons. Firstly, the railways presupposed highly developed iron and coal industries.

The steam-engine had to be on the scene. The art of engineering also was required to be of very advanced type. These things could not be available, until the Industrial Revolution had made considerable progress. Secondly, the railways entailed a vast investment of capital; and hence could come only when the community had built up the necessary amount of capital and productive power. Thirdly, railways could be successful only if commerce, which they were required to cater to, was on a large-scale. The railways, therefore, could come only when commerce had already sufficiently progressed or was potentially capable of progressing rapidly.

Once the railways came on the scene, they ousted the roads and canals. They were superior to road transport in that they were speedier and more capable. They were superior to canals in that they could be built anywhere irrespective of the contours of the country as canals could not be; and were operative throughout the year while canals were liable to freeze in winter and dry up in summer. Other advantages of the railways were that they excelled in speed and hence were especially suitable for the transport of the perishable articles; that for the transport of coal, iron ore and grains, they could be taken to the place of production as canals could not be; that, if necessary, they could easily unload their burden directly in the hull of ships, and avoid the cost of transshipment; that they gave better terminal facilities etc. It is also necessary to note that roads and canals supplemented one another and flourished side by side. Canals did not mean the fading away of roads. They could not substitute each other. The railways, however, were better substitute for both roads and canals simultaneously. In the railway era, therefore, canals and roads could not compete with railways on equal footing and survived only where they had special advantages, or only where they were supported deliberately by the

State. In England and U.S.A. the State did not mind their decay. In France and Germany, the canals survived, but only at the expense of the Government treasury. In the beginning of the 20th century, the automobile appeared on the scene. It represented a more advanced mechanism and required a finer type of fuel. It equalled the railways in speed and excelled them in low initial cost, low cost of operation, easy accessibility to any place or godown, convenience of the time of the journey etc. The railways, however, have been able to hold their own because of the greater capacity to carry goods and greater comfort afforded to passengers.

Sec. II. State Policies

In respect of State control, it will be recalled that there was no uniformity of policy followed in various countries, not even in the same country in respect of various forms of transport. In England, there was considerable State control in respect of ocean-going transport in the form of Navigation laws, until they were repealed in the middle of the 19th century. Road transport and canals were entirely left to private enterprise, in the form of turnpike trusts and canal companies. Railways, too, were constructed by private enterprise, but gradually after 1840. Parliament awakened to the supreme importance of railways and gradually extended its control, over the gauge to be adopted, facilities to be provided, over the safety measures, rates, profits etc. Yet in all these forms of control, it does not appear that the State participated in the building of the means of transport by initiation on its own account, by ownership, by partial contribution of capital, by subsidy or by guarantee for the interest on capital sunk. The State, in other words sought to regulate private enterprise. It did not offer to bear the economic risk.

In France and Germany, the State actually invested capital in the making of roads, canals and rail-

ways. Wherever private enterprise was allowed, it was rigorously controlled; and the State authority entered into partnership with private enterprise. The long term tendency, further, was to dispose of private enterprise and take over, all the means of transport. The continental policy was thus in striking contrast to the British policy. The U. S. A. inherited both the policies. Private turnpike trusts were allowed on the roads and yet the State too spent enormous amounts. Canals were mainly constructed by the State; but railways were left to private enterprise, generously helped by the State. The State policy in the U. S. A., thus was not a consistent one. In India, on the other hand, roads, canals and railways became entirely a responsibility of the foreign government. Roads were built by the State entirely on its own initiative and capital. Railway construction was mainly undertaken by British private enterprise; yet the State had to give free hand and guarantee a rate of dividend on capital. The means of transport thus being the State's responsibility, the control too was vested in it.

Explanation of Different Policies

A few reasons explain the difference in the policies pursued. It will be seen that the needs of defence constitute an important and decisive factor in respect of State policy in all countries. England was an island and its main defence had to be built up on sea. Land transport was comparatively less significant, because British strategy was never to fight war on its own land. We find, therefore, that the State was very anxious for the development of its navy. Until quite recently, every merchant ship could be a war-vessel too and that is why England, which otherwise left the development of transport to private enterprise, took special care to nurse its merchant marine. Even Adam Smith, who was a staunch advocate of non-interference by the State in all spheres of economic activity,

exempted shipping from his "Laissez-faire" advocacy. France and Germany, on the other hand, were land powers. Their defence depended upon their land armies; and road and railway transport, which gave easy mobility to their armies, was of fundamental importance. It was natural, therefore, that the States should be anxious about the development of roads and railways. They, therefore, invested capital in these on their own account and vigorously controlled private enterprise, where it was allowed. In the U. S. A., the problem of defence was not a pressing one, owing to its distance from Europe and comparative backwardness of its immediate neighbours like Canada, Mexico and South American countries. The State, therefore, was not dictated in its policy towards transport, by the needs of defence against outsiders. But even there, it may be noted that the Civil War demonstrated the value of railways to the State and trans-continental railway development was stimulated by the State after the War. In India, too, the development of railways was rendered necessary for the defence of the British power both against foreign aggressors like the Frontier tribes and against the Indians themselves, in case they attempted to disturb the King's peace, as in the Mutiny of 1857, and in subsequent national struggles. In India, therefore, we find that the State authority itself built strategic railways, invited British private enterprise for the rest but in any case retained control in its own hands.

Another cause which partially explains the differences in State policies is differences in the political character of the States. In England, the power of the monarch had been broken down completely by the 18th century, when the Industrial Revolution hastened the development of transport. The corresponding economic policy for a political democracy of the 19th century was Laissez-faire or non-interference by the State in economic activity. England, accordingly, pur-

sued a course allowing utmost freedom to private enterprise. It is true that, in England too, the State controlled navigation up to the middle of the 19th century and railways since then, yet the inclination of State policy is definitely on the side of the Laissez-faire doctrine. The U. S. A. followed England's footsteps in politics and also copied the Laissez-faire policy in economics. If there is any differences between the State policies in these countries, it is due to the fact that the U. S. A. was a still developing country, having had to explore its unsettled parts and to encourage colonization of these. That is why the State allowed private enterprise to have its play and went to help it when it proved unable to cope with the needs of new colonization. In France and Germany, the national political tradition was 'command from above and obedience from below.' The state ownership and control of transport, therefore, was more agreeable to the two nations. In India, on the other hand, a foreign power was ruling when the means of transport grew in the 19th century and it was natural that the state power retained control and ownership and that Indian private enterprise did not have any share in the development.

Lack of private capital is another cause that explains the differences. In England, private capital was available and forthcoming for transport development. In Germany, France, U. S. A. and India, private capital was yet to accumulate to be adequate and State had to initiate, help and own the means of transport.

One more factor which deserves mention in this connection is the tendency of private enterprise in modern times to form combines and try to assume monopolistic power. This combination movement is a characteristic only of the advanced form of capitalism. In the early period of industrial capitalism i.e. upto about 1875, the business units in industry and commerce were not big enough to pursue the course of

combinations with any prospect of success. We do not, therefore, find any combinations being attempted in the Turnpike Trusts or Canal Companies—which operated mainly before 1850. The railways, however, were big business units themselves, had monopolistic position granted to them by Parliament in their respective areas and were operating when combination movement had started in different branches of industry and commerce. The private railway companies in England and the U. S. A., therefore, attempted combinations in the late years of 19th century, and in a way invited State control in a more rigorous form. This explains partially the difference between policies of the same State towards different means of transport. In countries like Germany, France, and India, the problem of curbing transport combinations did not arise at all, as the State had decisive voice in the working of transport systems from the very beginning.

Sec. III The Effects of the Development of Transport on Commerce, Agriculture, Industry, Society And Governments.

As the development of transport alone makes wider markets possible, it is the basis of all economic development. As such, the development of every branch of economic activity can, in some measure, be traced to the development of transport. In what follows, the main effects on agriculture, industry, commerce and social and political organisation are briefly indicated. The effects on commerce are described in more detail under the 'Commercial Revolution.'

On Agriculture

The effects on agriculture were mainly fourfold. The development of transport made specialisation possible in agriculture. Different areas came to produce only those crops in which they had the maximum advantage. Before transport enabled easy import and

export of agricultural produce from any locality, local agriculture was required to produce all essentials of life, like different varieties of food, cotton, sugar-cane etc., irrespective of the suitability of the soil and climate for all the kinds of crops. With the development of transport, however, the local self-sufficiency could be dispersed with, and soil and climate harnessed to produce what particular crops could be produced with the greatest advantage. In India, therefore, we now find that Bengal specialises in jute, the Punjab in wheat the C. P. and Bombay in cotton, the U. P. in Sugar-cane and so on. This specialisation was not to be found in India before railways made large-scale transportation possible. Another effect of transport development on agriculture was that the market being widened, the prosperity or otherwise of local agriculture came to be determined by conditions prevailing in the wider markets. In many cases the markets covered the entire world and local agriculture, in a way, came to be at the mercy of fluctuations in the world markets. In case of Indian produce, the markets for wheat, cotton, tea, coffee, sugar etc., are world markets. The Indian prices of these commodities, therefore, are determined by world forces. This has been generally to the advantage of Indian agriculture. Yet it is also true that the widening of the markets has made Indian agriculture susceptible to world forces of depression. The Indian agriculturist for no fault of his, has suffered heavily from periodic depressions visiting the country from abroad. Similarly English agriculture too, has undergone vicissitudes of fortune due to the development of transport. From 1850 to 1875. English agriculture was prosperous mainly because the development of railways in England widened the market for English agriculture. But from 1875 to 1900 it fell on bad days; because the development of railways on the American continent and the development of steamship on the Atlantic enabled American-

wheat to invade the English market successfully. The same was the plight of French and German agriculture. The third effect of the development of transport on Indian agriculture has been that it enabled machine-made goods to reach the villages and the agriculturist lost his subsidiary occupations like spinning. The loss is heavy one; because agriculture mostly is an intermittent job, which allows a subsidiary industry, and by itself is hardly remunerative enough. In India, the agriculturist has been affected adversely because the development of transport deprived him of his traditional by-industry. On the other hand, it must also be noted that the transport development has made certain new by-industries available to him. Before the speedy means of transport, the agriculturist, far away from towns, could not engage himself in dairy industry, poultry farming, fruit gardening or vegetable-growing. This; however, is possible now. The English agriculture, it may be noted, overcame the depression caused by American imports, mainly by turning to supplementary industries mentioned above at the end of the 19th century. The Indian agriculturist has unfortunately yet to learn the lesson. Fourthly, it may be noted that the development of transport has entirely changed the nature of famine. Formerly when food could not be taken from areas where it could be spared, to areas where it was needed, any local failure of crops meant an acute scarcity of food and often times it involved starvation. Thanks to the development of transport, however, food can be very easily moved into areas where it is badly wanted and human lives can be saved from starvation.

On Industries

The effects on industrial development have been the following. To begin with, it may be noted that large-scale production which is the key to modern industrialisation would have been impossible without wise

markets, and wide markets were impossible without the development of the means of transport. The raw materials too could not have been brought in huge quantities to the factories from far-flung sources without transport development. Secondly, industrial development requires concentration of labour in urban areas. The labour can come only from the rural areas, but this might have been very difficult without easy means of travel. Thirdly, it is transport development alone which has made certain basic industries possible in some countries. Without the railways, German coal and iron industry could not be developed. German railways, themselves consumed vast quantities of coal and iron and created a demand which stimulated the industry. Besides, they also enabled the distribution of coal and iron over wide areas. In India, too, the coal and iron resources are confined to a very narrow area but it is the railways which have made their distribution possible over all India. In the U.S.A. coal and iron ore are not found in the same region. It is, therefore, the lake-transport and railways that have been able to bring the two together and build the massive American iron and steel industry. Fourthly, transport facilities have often been able to attract industries to certain localities and thus decide their location. It is true that the development of transport itself is not possible unless there is enough trade in a locality. But it is also true that, once transport develops on account of some industries, it begins attracting new ones to the same locality. Fifthly, transport has been very greatly responsible for fostering industrial and commercial combinations and monopolies. The private transport companies help the formation of monopolies by giving special facilities to certain of their customers. They can charge them at lower rates than their competitors, can give them preferences in transport over their rivals and generally see to it that their favoured combines get better advant-

age of transport facilities than their rivals. In America, the Standard Oil Company and Carnegie Steel Company—two very big combines in oil and steel—owed much of their early power to the special advantage which they got over their rivals by entering into agreements with transport companies. Lastly, it may be noted that where the State came to control the transport facilities, it indirectly came to control the industries too. Without transport, large-scale industry is not possible at all and hence, he who controls transport also controls the Industry too. In Germany, the State used the transport system as a lever to lift up certain industries.

Effects on Commerce

The effects on commerce were briefly these. The development of transport led to enormous increase in internal and international commerce. Many new commodities—especially the bulky or the perishable goods—acquired mobility thanks to cheap and speedy transport. Commerce, therefore, became varied. The scale of commerce being changed, old methods of commerce had to be given up and new ones were developed. The organisation of markets underwent a radical change. New types of commercial organisations sprang up and new methods in finance were evolved. The services of middlemen gained in importance and new art of salesmanship and advertising became necessary. These effects are described in detail under Commercial Revolution.

Social Effects

As important were the economic effects of the transport development its social and political effects too were striking. With the development of transport men could move easily from place to place; and with revolutions in agriculture and industry, men moved from rural areas and found shelter in cities. Big cities

were thus made possible by the transport development. Besides, these cities could not have survived, if transport facilities had not been available for importing food from fields, near and far. Secondly, apart from the concentration of population in cities, the development of transport stimulated migrations of peoples as between different parts of a country and as between different countries. In India, the influx of population into Assam and the Punjab Canal colonies has been a case of internal migration. The migrations of peoples from Europe to America, from England to Australia, South Africa and Canada, from India to Africa, Burma, and Ceylon etc. are cases of international migrations.

These large-scale migrations and the need for State policies in regard to them are peculiar problems for which the development of transport is much responsible. In another sense, the development of transport has produced results favourable for social life. The ease of travel has broken down isolation of part and made every country an integrated whole, which it formerly was not. Social intercourse between peoples in different parts of the country has increased and the concept of nationhood has gained in strength. Cultural and intellectual life too has been enriched by the increased social contact. In India, the railways did much to whittle down the old social distinctions of castes, as they built up cosmopolitan cities and themselves forced men of all castes and religions to travel as passengers on equal footing. Moreover, the development of transport has affected the woman too. By bringing and storing of household requirements, the transport development has relieved women of much of household work.

Political Effects

The political effects too are remarkable. It is only the transport and communications facilities that have enabled modern government to exercise their authority

effectively in every nook and corner of the country. The Government officers, police and army can now move easily and fast enough to tackle in time any slightest disturbance to peace. Formerly, in absence of these facilities, the Central government had to delegate authority to men on spot. These representatives of government could not be supervised closely and this weakened the hold of the central government. The transport facilities are thus responsible for the creation of strong central governments in all countries. As an interesting result, it is pointed out, that the menace of thugs and robbers in India could be eliminated only when the railway facilities were developed. Secondly, the development of transport has led to the formation of powerful nations and empires. When sea-transport alone was developed, countries with suitable outlets to sea rose in power, e.g. England, France, Holland etc. With the development of railways, however, great land-powers came to rise. The U. S. A., Germany, Russia and India were able to derive strength from their vast expanse of land, only through the railways. The British Empire owes much of its tenacity to both land and sea transport. It may further, be noted that the development of transport gave new value to colonies as sources of raw materials and markets for finished goods. The industrially advanced nations, therefore, developed colonial rivalries and from 1870 onwards particularly, began the scramble for Africa, Asia and America. History tells us that the very numerous wars during the last hundred years mainly arose out of this hunt for colonies.

CHAPTER XIII

CHANGES IN ECONOMIC THOUGHT AND POLICY

Sec. I. Mercantalism

Before the 16th century, there were no nations in existence. The whole of Europe was a patch-work of different kingdoms, not separated as nations, and bound together by the common Christendom. There was rivalry between the Kings, but not between peoples of different countries as different nationalities. Economic organisation was based on the feudal principles, according to which agriculture, industry, trade etc. were controlled by local feudal authorities. There was no national control over economy, because there was no nation at all in existence. The king did not bother to control the entire economy in his kingdom, because there was no motive for doing so.

This state of affairs changed with the rise of nationalism in the 16th century. The king became the head and representative of the nation and the rivalry between the kings could take the shape of rivalry between nations. This rivalry led the nations to adopt the means of becoming strong and powerful in the race of national glory and aggrandizement; and the national state took up the direction of the nation's economic activity as a means to this end. This economic policy of the rising nationalism of the 16th and 17th centuries is known as Mercantilism.

The policy affected all branches of the nations economic activity. It wanted a large and healthy population. It, therefore, encouraged the birth-rate,

by giving special concessions to men of large families. As the village population was healthier than the town population, it discouraged any economic measure that would lead to exodus of population from the rural areas. Accordingly, the Tudors in England, sought to check the first enclosure movement in agriculture, which drove away many of the cultivators.

The policy in regard to agriculture was to make the nation self-sufficient in respect of food. Adequacy of food was the first essential of a strong nation and was indispensable in times of war. The mercantilists could not think of depending upon the imports of food, for the very life of the nations. The substitution of food-crops by pasture or other non-food crops was deprecated. The rulers of England and Germany took special care to oppose contrary tendencies in agriculture.

Industry was likewise regulated in the national interest. It ceased to be controlled locally by the guilds. In England, the efficiency of labour was sought to be kept up by the Statute of Artificers of 1563. Wages of labourers were regulated through the Justices of Peace. Restrictions were placed on the technique and quality of goods to be produced, with a view to stabilise the industries. Export of raw materials was discouraged and that of finished goods was encouraged. Even though the general policy regarding overseas trade was to restrict the imports, concession was allowed in respect of the import of raw materials for the national industries. The King's Council issued directions for the industries from time to time and the Justices of Peace were appointed to carry them out. In France, Colbert attempted the same thing and issued 32 codes of regulation and 50 edicts applying to industries..

The nation's foreign trade was made a special object of regulation. It was believed that to amass

precious metals was to build up the nation's strength, especially for the purposes of war; and that the foreign trade was the main instrument of amassing the precious metals, especially for countries like England, which had no gold mines within themselves. Exports of goods, therefore, were encouraged and the imports were discouraged with a view to get precious metals as a payment for the export balance. Exports were encouraged by bounties to those industries which produced for foreign markets. Imports were checked by duties and prohibitions.

The navy too was a special concern. The navy was obviously of the greatest importance for a nation like England; but in the circumstances, a professional navy could not be afforded. The merchant shipping was, therefore, encouraged; and the merchant ships, in those times, were quite useful as war vessels. For the encouragement of the merchant shippings, various Acts were passed in England specifying the compulsory use of English ships and seamen in trade. The Acts are known as Navigation Acts.

The Mercantilist policy, in regard to colonies, was shaped with the same end in view. They were not regarded as daughter-nations themselves; but only as outposts of the mother-nations, maintained solely for the purpose of enriching the mother-nation. Only such colonial industries and agriculture, therefore, were allowed as would supplement the economic activity of the mother-nation. Colonial industries, as would compete with similar industries of the mother-nation, were not allowed. Accordingly, England did not allow the growth of the iron and cotton textile industries in her American colonies. Colonial trade too was reserved for the shipping of the mother-country. Goods wanted by the mother-nation—'enumerated goods'—were required to be taken to her alone. The rest could be exported to other nations, only in

the ships of the mother country. Besides, all colonial trade was a monopoly of the mother-nation. No other nation was allowed to trade with the colonies.

It will be seen that the Mercantilist policy was best suited to serve two ends. One was to make the nation strong, by directing the nation's economy in the national interest. The other was to give scope to the nation's rising middle class of merchants and industrialists to further their trade and industry. The policy adopted was to eliminate the competition of the foreigner and to develop the nation's economy by granting monopolies to the nationals. In the undeveloped state of industry and trade, monopolies were regarded as better suited than unrestricted competition. Mercantilism, thus, was the policy of the nascent nationalism in league with the rising middle class of merchants and industrialists.

Mercantilism is criticised on two planks. In the first place it is argued that its policy of building up national self-sufficiency at the expense of the greater economic gains that might have accrued from international division of labour and free trade, was harmful to the interests of nations as a whole. But it must be remembered that each economic policy must be judged with reference to the economic conditions prevailing at the time; and Mercantilism can be defended as a policy which preferred safety to abundance and rightly too in the circumstances. The other plank of criticism is that it was a false economic dogma; and this criticism was partly based on sound reasoning. The criticism pertains to the policy of encouraging exports and discouraging imports with a view to amass treasure. Now, it is pointed out that the policy is impracticable if all nations begin following it. For, all nations cannot evidently build up an excess of exports over imports. Moreover, Mercantilism was wrong in its belief that treasure was an end in itself. Mere

massing of treasure does not signify economic prosperity. Besides, the ideal of importing treasure indefinitely was illusory. It overlooked the fact that imported precious metals would go into circulation as money, would increase the prices of goods and ultimately check the exports and encourage the imports. Indefinite accumulation of treasure would ultimately defeat itself.

The criticism, as abstract reasoning, is correct and would apply in the long run. But it must be remembered that the policy was practicable in the short run; and that it had much to commend itself as a short-run war-measure.

Sec. II Reaction against Mercantilism

Under Mercantilism the State nursed the economic development through its colonial policy, the Navigation Acts, the regulation of foreign trade, the accumulation of treasure, the encouragement to industry through bounties, monopolies, and prohibitions etc. By the middle of the 18th century, economy had advanced enough not to need any such help from the state. In fact its further development required the withdrawal of state regulation.

By the middle of the 18th century, the important European nations had already divided the world between themselves and built up stable empires. The colonial trade was no longer required to be kept a monopoly of the mother nation. The colonies too, resented the old policy and the American colonies broke away from the mother country in the seventies of the century. The mother country's economies too had been developed enough not to fear competition from the development of the colonial economies. The old Mercantilist colonial policy was thus outmoded. In England, the Navy was now strong enough not to need the protection of the Navigation Act. The navies

of other European nations had been smashed and England could remain the 'mistress of the sea,' even without the Navigation Acts. The regulation of imports also was no longer necessary. In England the national industries had occupied the home market and felt no fear of foreign competition. In fact their further development depended upon an expanding foreign trade. English industries, especially after the Industrial Revolution were competent to conquer foreign markets if once free international trade was established. In the field of international trade, therefore, it was necessary to withdraw state regulation. Internally, also, industrial development was to be on capitalist lines; and capitalism required an open field, without state regulation. The change in the economic conditions and the needs of economic development, thus, made the Mercantilist system obsolete. It had to go inevitably in the cause of economic development; and as it happens, the theorists came in to explain and justify the change rationally.

The first amongst the economists, to criticise mercantilism, were the Physiocrats, a school of economists which arose in France from the middle of the 18th century. They propounded that there was a 'natural order' for the economic organisation and it would be established when state regulations are withdrawn. In England, they were closely followed by a greater economist. Adam Smith, who published 'The Wealth of Nations' in 1776. Smith opposed Mercantilism on four major grounds. In the first place, he pointed out that the individual knows his economic interest best and that he is able to achieve it best, only when left totally free by the state. Besides, the state has nothing to fear, even from the social point of view. For, the individuals' interest and the society's interest are never conflicting. The individual, in furthering his self-interest, also promotes the social interest too. Any restrictions imposed by the state, were, therefore

harmful. Secondly, he pointed out that the State is a bad and inefficient administrator of economic affairs. Economic activity is far better left to the care of the individual. Thirdly, he pointed out the advantages of division of labour amongst nations; and advocated the free international trade. Under free trade, he pointed out, every nation would specialise in those lines of production for which its natural resources and enterprise were best suited; the total production of all nations together would be greater than under any other system; and every nation would benefit from its share of the total increased production. Finally, Smith exposed the Mercantilist fallacy that accumulation of treasure was accumulation of wealth, to which we have already referred.

Sec. III Prevalence of *Laissez-Faire*

The Mercantilist doctrine and the State's direction of economy being thus discredited the State retired from active participation in economic activity of the society. This policy of non-interference by the State is called the *Laissez-faire*—let things alone.

In England

The doctrine of *Laissez-faire* developed first and the foremost in England, because it was in England that the capitalist economic development needed it most. In other countries, the development of trade and industry had not advanced to the stage where it could altogether do without the State's assistance. In other countries, therefore, though the *Laissez-faire* policy was adopted as a reflex action to England's it was not done to the same extent.

In England, industry was gradually left alone. The statute of Artificers, which regulated the terms of apprentices, and the conditions of wage-earners was allowed to fall in disuse. When the early factories

were growing up, the State did not intervene to regulate their location, construction or employment of men, women and children. No 'restrictions' were placed on the migration of people to industrial towns, and the State did not care to see whether the labourers lived in healthy surroundings or in slums. Before 1825, the export of machinery was prohibited, lest competing machine industries may grow in foreign countries and jeopardize the position of English industries. But in 1825, the prohibition was withdrawn and English industry was exposed to the possible rivalry of foreign industries. Of course, as we have seen, this was done only when the English industries were already developed enough to face any such foreign development.

In regard to labour, the early provisions for the regulation of wages were withdrawn and the combination laws which prevented labour's organisations for collective bargaining, were relaxed in 1824-25.

The development of transport was left entirely to private enterprise. Roads, canals and railways in England were built at private risk, and without any economic help from the State. Even the shipping, which was nursed by the State right from the 15th century was now allowed to stand or fall by itself. Between 1824 and 1849, the Navigation Laws were relaxed on the principle of reciprocity with other nations; and accordingly treaties were entered into with Denmark, Netherlands, France and Austria, before 1830. The Navigation Laws were altogether repealed during 1849-54.

In regard to foreign trade, there was a notable movement towards free trade. The monopolistic character of the trading companies was abolished. In 1786, the younger Pitt removed the embargo on trade with France. The policy of freeing trade might have proceeded uninterrupted but for the Napoleonic wars, which not only prevented any such measures upto

1815 but also gave rise to the Corn Laws from 1866. According to these English agriculture was protected by a ban on the import of foreign wheat until, the price of English wheat was less than 80 shillings a quarter. Above that minimum, a protective duty was made operative.

But Huskisson, minister of trade, resumed the policy of freeing trade from 1823 and was followed in the same tradition by Peel and Gladstone. During 1824-27, Huskisson simplified the laws regarding the foreign trade, reduced the import duties on raw materials and such manufactured goods as were not likely to compete with English goods and abolished the restrictions on export of goods. Between 1842 and 1845, Peel reduced the number of dutiable articles from 1150 to 1590 and under the stress of acute food shortage and high-prices in England and Ireland, was obliged to repeal the Corn Laws in 1846. From 1853, his work was carried on by Gladstone who removed duties on all but 48 articles. The number was reduced to 20 in 1875 and England virtually adopted the principle of free-trade. In 1860, a commercial treaty was also entered into with France.

There was an appropriate change in the colonial policy too. The colonies could no longer be regarded as outposts of the mother country. Their trade and industry could not be bound to suit the needs of the home economy. The falling off of the American colonies from the Empire convinced England that the colonies were bound to break away sooner or later. Till then they were to be suffered as a liability. The old colonial system was, therefore, relaxed; and fiscal autonomy and political self-government were readily given in increasing measure. The trade with India was thrown open to all in 1813 and that of China in 1833.

It will be seen thus, that in an attitude of resignation, the state retracted on all fronts and the active Mercantilist policy was allowed to lapse.

In Germany

In Germany too, the Laissez-faire policy was implemented to a notable extent, but it was mainly noticeable in regard to trade. Before 1815, there were numerous small German States. They not only imposed tariff barriers against one another, but erected them between different parts of themselves. Trade, therefore, was much handicapped. Realising the benefits of freer trade, Prussia, the leading German State initiated a liberal policy for itself in 1818. It abolished all kinds of internal tariffs, allowed the import of raw materials free, reduced the duty on imports of manufactured goods as low as 10% and abolished all prohibitions on industrial enterprise, except in case of salt and cards. In 1826, it formed a commercial union with some of the Northern States and the union as a whole adopted the Prussian policy of 1818. Similar unions were formed of the Southern States in 1825 and of Central States in 1828. In 1834, the three unions combined to form a joint commercial organisation—the Zollverein. The Zollverein adopted a policy similar to that of the Prussian policy of 1818. The policy was obviously a very liberal policy and was suited to the interests of Prussian agriculture. The Prussian junker landlords produced for export market and, therefore, wanted a free-trade policy. The same policy received strength from the remarkable triumph of free-trade policy of Britain. It lasted until 1879, when the protectionist forces gained ascendancy.

Until 1870, Germany had no advanced manufacturing industry and no colonies. We do not, therefore, find a counterpart to English Laissez-faire policy in regard to German manufacturing industry and

colonies. But, for reasons explained earlier, Germany did not follow a *Laissez-faire* policy in respect of the development of transport.

In Russia

In the 19th century, Russia had still a primitive economy and a *Laissez-faire* policy was hardly necessary. Yet we find it also affected by the general European trend of free-trade. Upto 1824, the Russian duties were prohibitive. Between 1825 and 1850, they were tempered down to be only protective. From 1850, there was at least some movement of the economic activity. Serfdom was sought to be abolished. Free trade had come to stay in most of the European countries. Russian exports found that foreign restrictions on them had been withdrawn. There was, therefore, bound to be some response from the import side. Import duties were lowered, and Russia concluded some commercial treaties with European countries.

In U. S. A.

In the U. S. A., the problem of free-trade was altogether of a different character. The revenue from import duties was the mainstay of the Government of the new country which had no other stable sources of revenue; and free-trade policy could be adopted only to the extent allowed by the Government treasury. Besides until the civil war, the industries were in their state of infancy and needed protection from the State. We do not find any free-trade policy adopted by the U. S. A. Of course, there were fluctuations in the rates, according to the convenience and needs of the treasury and the ascendancy of the rival political parties. The Democratic party favoured free-trade as far as possible. The Republican party was strongly protectionist. The tariff fluctuated between 20% and 47%.

In internal matters, however, the State followed a policy of *Laissez-faire*. The development of agriculture and industry was left to themselves. In respect of the means of transport, the State followed a mildly active policy. The States undertook the construction of transcontinental roads, the construction of canals and helped the railways by grant of free-land.

In India

In India, the economic policy of the State was that of the foreign rulers and it was dictated and shaped by the needs of England. Accordingly, the import duties were kept as low as possible, consistent with the needs of the treasury. In 1882, they were actually abolished, but from 1894, were imposed for revenue purpose. Their level was as low as 5 to 10 %. At no time before 1914, were the duties intended to be protectionist. In fact, to counterbalance the little protective effect of the revenue duties, an excise duty was levied on Indian cotton yarn and cloth from 1894.

In respect of industries, the Government had not even the desire to foster the development. The *Laissez-faire* policy was, therefore, faithfully followed. Exception was made only in respect of the Factory Acts; but that was dictated by the interests of the Lancashire cotton industry. Up to 1914, the Government of India—did practically nothing by way of active help to industries. Its record in organising geological survey, industrial research, technical training, import of foreign capital and skill, financial help through subsidies, tax-remissions and transport concessions etc. is unedifying.

Only in respect of the construction of railways, it took active interest for reasons explained earlier.

It followed the same policy of *Laissez-faire* or in fact indifference, in regard to agriculture.

Sec. IV. Reaction Against "Laissez-Faire"

The main tenets of the philosophy of Laissez-faire were: (a) The individual knows his interests best; and, if left to himself, would so direct his energy and capital as would yield him the greatest return in the circumstances. (b) The interests of the individual and the society are identical. In furthering his own self-interest, the individual also promotes the social interests. (c) If left to themselves, the individual and the society bring about such an economic organisation, as is not only the best but also just for all. (d) The State, as an agency of economic activity, is inefficient, wasteful, corrupt and on this philosophical basis, the advocates of Laissez-faire prescribed a policy of non-interference by the State in economic affairs; and hoped that under Laissez-faire, everything will be just and right for the world.

But this wishful thinking was not realised in fact. Under the laissez-faire, the total wealth of the society went on mounting, but the masses of people failed to share in it. They were doomed to perpetual misery, worse than under the previous system. This extreme inequality of wealth stood to refute the claim of the laissez-faire economy to be just. Further, the periodic breakdown of the economic activity according to the trade cycles, glaringly brought out the fact that the system was not the best even from a purely technical point of view.

In theory, the "laissez-faire" doctrine suffered both at the hands of Smith's own followers—the classical economists, as well as at the hands of the Socialists. Malthus, Ricardo and Mill were amongst the chief followers of Smith. They willingly and unwillingly exposed the rifts in the "laissez-faire" doctrine. Malthus propounded a theory of population, according to which the population grew faster than could be sustained by the earth and hence it was liable to be cut

short by periodic starvation, epidemics, diseases and wars. This was clearly a refutation of the optimism that under "laissez-faire" all will be well with the world. Malthus, also pointed out that any rise in the wages of workers would not result in a rise in their standard of living but in an increase in population at the same old miserable standard of living. There was, therefore, no hope for workers to better their conditions. This was another refutation of the optimism of the classical doctrine. Ricardo, in his theory of rent, pointed out that rent of land, which the landlord received, was due to differences in the fertility of lands and not due to any effort of the landlord. This meant that the landlord was appropriating a share of the national wealth for no just cause. Mill went to the extent of suggesting that since rent was an 'un-earned' income, it should be confiscated by the State. Ricardo's theory also pointed out that the rent of the landlord went on increasing with increasing scarcity of food and rising prices. This meant that the interests of the landlords were not identical with social interests. Further, Ricardo's theory of wages and profits implied that wages can rise at the expense of profits and vice-versa. They were mutually conflicting and hence the interests of the wage-earners and those of the capitalists were antagonistic.

The Socialists including Karl Marx were vehement opponents of the capitalist system that was growing under the "laissez-faire" doctrine. They emphasised the glaring unequal distribution of wealth and attacked the very system of private property in the means of production—a system which was the corner-stone of the capitalist economy. They also pointed out how labour was being cheated of its due share. They further brought out the fact that the capitalist system was concentrating wealth in fewer and fewer hands, was building up monopolies and that the individual's freedom of economic enterprise was being increasingly

sabotaged. The free economy which the "laissez-faire" policy was expected to ensure was thus being destroyed. The Socialists stressed that the interests of the workers and the capitalists were conflicting; and that, in this conflict, the capitalist system would be ultimately overthrown. The State then would of necessity, undertake the entire economic activity once again under its control. The "laissez-faire" policy was thus doomed.

The reaction to "laissez-faire" in the field of theory rallied into two separate camps. The moderates advocated only active State help to and supervision over the economic activity, wherever necessary. The radicals advocated the overthrow of the capitalist system as quickly as possible and consequent state enterprise in economic matters.

Certain other practical problems in the international economics and politics forced the hands of politicians to give up the policy of "laissez-faire." In Germany, Fredrich List advocated the protection for German industries on the ground that until the industries grow and become stable in maturity, they can not be expected to stand competition of foreign advanced industries. The German Empire accordingly developed its industries behind the wall of protection from 1879 onwards. The German Empire formed of all German States in 1870, was also in a hurry to develop its military power by developing its industries. It, therefore, helped industrial development actively by giving tariff protection, subsidies, tax-remissions, transport concession and by organising research and industrial training. With this substantial help from the State, the German industrialisation was spectacular in speed and tempo. It dazzled the "laissez-faire" countries and made them suspicious about the wisdom of the "laissez-faire" policy. The rapid industrialisation in the U. S. A., fostered once again behind

a tariff wall strengthened the reaction against "laissez-faire."

From 1870, rivalries between the nations were once again intensified. In the international field, the rise of the German nation after 1870 was a disturbing thing. The new German nation, having stabilised itself at home, aspired for colonies abroad, and touched off the scramble for colonies in Africa. For its own industrialisation, the colonies were obviously necessary for Germany. But with the rise of the rival German industrial power, they assumed a new significance for England too. For once again, the national rivalries of the 16th and 17th centuries were revived, and the European nations once again launched the private trading companies to grab land in Africa. On such a background the "laissez-faire" attitude towards the colonies had to be dropped for all nations, including England.

The development of communications and railway transport in America, Africa and Australia added a new meaning to the colonies. They became parts of a closely integrated world market. Their raw materials and food products became more valuable for the mother-countries. The old indifference and resignation about the colonies had, therefore, to be given up. The mother-countries began to take active interests in financing the development of transport, communication, irrigation etc. in the colonies and dependencies.

The growth of the labour organisations in industrial countries further forced the hands of governments to take active interest in economic affairs. The trade unions ceased to be bodies for merely economic purposes. They became important political forces too; and no governments could afford to remain indifferent to the organisation of industry and the fate of labour there in.

Sec. V. The Decline of the Laissez-faire

In England, the first breach in the laissez-faire policy was made by the early Factory Acts. It is true that the laissez-faire policy in regard to trade was in full swing between 1825 and 1875. But during the same period, the laissez-faire policy was being gradually abandoned in respect of the employment of women and children. The Factory Acts which progressively tightened the hold of the state over the factories were the forerunner of later active policy of the state. From the forties, the state also deemed it fit to supervise the working of the railways.

The main labour legislation clustered round the turn of the century. By then the Factory Acts had clearly, defined the conditions of work and the terms of employment of women and children. In 1893, an Act restricted the hours of work of shops-assistants. From 1909, Trade Boards were established in several industries to stop the sweating of labour and to determine the minimum wages. From 1880, compensation was made available to workers in case of accidents. In 1901, the Health Insurance Act protected the workers against sickness. In 1909, the state undertook to provide pensions for old workers. From 1908, the state intervened in the disputes of labour and employers and legal provisions were made for conciliation-efforts, arbitration councils, and work-committees.

In respect of agriculture the state abandoned laissez-faire and established the Board of Agriculture to look after it. Legal provision was made to provide compensation to tenants at the time of their leaving the lands for the improvements they might have effected in the lands. Sanitary regulations were formulated for stalls in the interest of the farm-stock.

In respect of trade, the Merchandise Marks Act was passed in 1887 to prevent foreign goods to pass as British goods in the home markets. A Commercial

Intelligence Department was established to supply statistics and information about the activities in the world market, through Board of Trade journal. Trade Commissioners were appointed in foreign countries and colonies to foster the interests of British trade and industry in the foreign markets. In 1903, Mr. Joseph Chamberlain, the then Colonial Secretary, suggested a protective tariff for Britain; but the idea did not materialise.

The colonial policy was thoroughly overhauled for reasons given earlier. Before 1875, the colonies had been made self-governing dominions. For a time being after 1875, even an Imperial Federation of the mother country and the colonies as a single political unit was contemplated; and though it was too good to come true, tradition was established for occasional Imperial Conference of the Prime Ministers of Britain and the colonies in the cause of common good. An Imperial penny postal service was organised in 1898 and soon afterwards, the telegrams and telephones too were provided for. Trade Commissioners were appointed in the dominions for fostering the British trade and Britain's Trade Commissioners in foreign countries were asked to look to the interests of the dominions, along with those of Britain. The Empire, moreover, came to be looked upon as a customs union and preferential treatment was accorded by the members of the Empire to one another's trade. Canada granted a preference to Britain in 1897 by way of lower duties on her goods; and similar concessions were granted by other dominions subsequently.

In Germany, the Zollverein followed a liberal trade policy upto the formation of the Empire in 1870. But the Empire turned protectionist. The causes were: (a) The Empire's revenue needs necessitated a steep rise in the duties. (b) After 1870, Germany

entered the arena of international power-politics and wanted a quick industrialisation to back her up in the game of politics. The German industrialists rightly pleaded for protection for their infant industries. (d) The free-trade policy before 1870 was backed by Prussian landlords who needed a strong foreign demand for their goods. But after 1870, Germany ceased to be an exporter of grains. German agriculture itself was threatened by competition of imports from America. And German agriculturists too joined the ranks of protectionists.

Heavy protection was, therefore, granted to both German agriculture and industry from 1878-79. Subsidies were granted to the protection of beet-roots. Agriculture was also helped by the organisation of co-operative societies, technical training and propaganda of better methods of cultivation. In the eighties, the State organised sickness insurance, old age pensions, and accident compensation for industrial labour. The Factory Act of 1891 regulated the employment of labour in factories.

Russia was never converted fully to laissez-faire policy. It had its protectionist traditions for long; and in the general trend towards protection after 1875. Russia became protectionist more so. The ideal of economic self-sufficiency of the Russian Empire was sought after and from 1881 Russia became fully protectionist.

As explained earlier, the U. S. A. was protectionist and India was free-trader, throughout the 19th century.

CHAPTER XIV

A REVIEW OF ECONOMIC DEVELOPMENT

Sec. I. Introduction

In the foregoing pages, we have seen the development of particular sectors of economic activity. It now remains to review the changes in a single broad perspective. This can be done by studying the pattern of the organisation of the economic activity as a whole, noting its distinctive characteristics at each of its defined periods of history and discovering the fundamental forces that are responsible for the changes. Such a review will be helpful in understanding the various changes as connected parts of a single evolutionary process. The pattern of economic organisation at any time is not formed accidentally. It positively emerges out of the preceding organisation and bears it imprints. It also vanishes into a subsequent organisation, not without making its contribution. A broad historical perspective, therefore, becomes necessary in order to understand the continuity of economic development and to assess the passing phases of economic institutions and organisations in a relative way.

Such a review is necessarily based on broad generalisations. The generalisations themselves are, no doubt, based on numerous particular facts of history; but they suppress their distinctive traits and emphasise only their common characteristics. A review based on such generalisations, therefore, looks more

logical than historical. The following review is likely to give the impression that economic history developed strictly, logically, rationally, and in the chronological order of changes given below. In point of fact, however, conditions described under the same label differed in particulars in different countries. The development was not always smooth and rational. Nor were the changes exacting according to the sequence given below, in all countries. Often times, more than one stage of economic development could be seen at once in the same country. The course of development described below may not, therefore, conform in detail to actual economic development in any particular country. Yet it is attempted here, for the reason that, though not fully faithful to facts, it helps understanding of the general evolution.

The system of economic organisation that came into being generally after the Industrial Revolution is known as capitalism. As Industrial Revolution in different countries was accomplished at different periods, the emergence of capitalism too was not simultaneous in all countries. It can, however, be said that capitalism emerged and thrived from the middle of the 18th century in England and during the 19th century in all other countries. The preceding system of organisation was feudalism. In its complete form, it existed in the Middle Ages i.e. upto the 16th century. The period between the 16th and the 19th centuries is one of transition from feudalism to capitalism. It, therefore, reveals the traits of both. In some respects and in some countries, the decaying feudalism still shaped the economic organisation. In others, the signs of the emerging capitalism were already visible.

Sec. II. The Character of Feudalism

The organisation of agriculture, industry and trade under Feudalism has already been described in

earlier chapters. For the purposes of comparison with the subsequent economic organisation, its distinctive characteristics alone are summarised below.

(1) The most distinctive characteristic of feudalism was the importance of land as by far the most important source of wealth, and the system of basing relations between men on their relation to land. The social, political and economic status of man depended upon how he owned, possessed, controlled or hired land. The man who owned or possessed land was in all respects superior to one who could not lay claim to any land. In fact, only by virtue of his land, a man could be a free man; and in absence of it, he was a bondman. Economic freedom was thus a privilege belonging only to 'landed' men.

(2) The whole economy was a very poor economy. The productivity of land and labour was very small by modern standards. Consequently, the population of a country, that could be sustained by the old economy was indeed very small, judged by standards of modern economy.

(3) The economy was not a free economy. The agriculturists were tied to the occupation, to the land and even to the customary methods of cultivation. The industry too was restricted by the guilds, in all its aspects. Due to lack of transport, there was not easy mobility of men and material. There were no competitive markets; instead, in agriculture and industry, the participants worked collectively or at least in conformity to common standards of enterprise.

(4) Money had not come to play any important part in the economic activity of the society. Exchanges were few. Goods were exchanged against goods in traditionally fixed proportions.

(5) In industry, there was no difference between the owners of the means of production in the tools and the owners of labour. The artisans provided their

own tools and labour. There was, therefore, no question of exploitation of the worker by the employer as in the modern economy. In agriculture, however, there indeed was such an exploitation, because the actual tillers of the soil did not own the land. The lord was the owner and by virtue of his ownership was able to appropriate a major part of the cultivator's produce.

(6) The entire spirit in forming the economy was one of restrictions, striving to maintain the status-quo and opposing any change whatsoever.

Sec. III. Forces of the Transformation of Feudalism

The commercial expansion was the greatest single force that brought about the transformation. In the first place, it created markets; secondly, it introduced money economy; and thirdly, it stimulated production. Let us now see how the different sectors of the economy were affected by these new forces.

When money became important as purchasing power, the lords agreed, and in fact welcomed, the commutation of the serf's physical services in terms of money. The lords thus became rent-receivers, instead of estate proprietors. The serfs, on their part, became gradually independent tenants free to manage their lands as they pleased, once they paid a fixed rent. The other feudal dues, fees and fines also were added to the rent. The tenants thus became free to increase their produce and to sell it for their own profit. The raising of the status of the serf to that of the tenant erased the most important of feudalism's characteristics viz. the villeinage.

In England, the extension of the markets made wool-producing through sheep-grazing more profitable than cultivation. This led to the enclosure movement of the 15th and 16th centuries. In the 18th century, another enclosurement was undertaken in England as

well as in other countries for better and individual agriculture. Scattered strips were consolidated into big farms. Small-scale cultivation was rendered competitively uneconomic and petty farmers were driven out of the field. The further extension of markets led to improvement in the technique of agriculture. It was mechanised and made scientific. The purpose of old agriculture was mainly the subsistence of the cultivator, and the owner of the land; that of the new agriculture came to be mainly the sale on the market.

The expansion of the markets stimulated the industry too. It led to the breakdown of the gild system. As goods became mobile, new industry could spring up outside the jurisdiction of the old gilds. And even within their jurisdiction of the town, the gild's authority declined, as the development of trade demanded more freedom for the merchant to buy from the artisans. The rise of inequality of wealth and prestige among the members of a gild also led to its downfall. The new national governments contributed their quota, by curbing the authority of the gilds.

But even more important than the decline of the gild system was the introduction of commercial capitalism which commercial expansion brought to industry. Commercial expansion increased the demand for goods and required production to be on a large scale. The petty artisan, however, was hardly equal to the task. The merchant himself had to provide raw materials and only ask the artisan to fashion it into finished goods. Gradually, the merchant came to supply even the tools to the artisans. Thus the artisans ceased to be independent businessmen themselves; and were reduced to the position of mere wage-earners. The only difference between them and the modern factory workers was that they worked with simpler tools and at home. The modern factory

workers work in the factory and with more complicated machines.

The new forces of commerce not only changed agriculture and industry, but also transformed the whole pattern of social organisation. The political relations of the various classes in the society—the King, the feudal lords, the clergy, the merchants, the serfs and the artisans—underwent drastic change. The new economy of expanded markets required freedom of trade, competitive buying and selling and increased protection. The feudal system, however, was designed for local self-sufficiency, production for subsistence, traditional rates of exchanges of goods and status quo in general. It was thus repugnant to the new expanding economy and had to give place to an economic system better suited to the needs of expanding commerce and industry.

The merchants were the representatives of the new forces of commerce. They wanted freedom of trade and, therefore, wanted to get rid of the feudal lords who restricted their activities. And in the King, they found their champion. The King, on his part, always wanted to bring the feudal lords under his strict control. But under the old system, he was dependent on the lords for his army. In the new money economy now, it became possible for him to maintain a standing army on payment of money and to dispense with the services of the feudal lords. The problem now was one of finding sufficient money. And it was, here, that the merchant class got its opportunity of supplying money to the King and to purchase in exchange freedom for their trade. The King and the merchants joined hands to destroy the power of their common enemy—the feudal lords.

The King's other rival in the political field was the Church; and here also the King and the new merchant class could be in league. The Church was deeply root-

ed in feudalism and had vested interest in the system. It was itself the owner of vast lands. It interfered in the King's political affairs; and had even its own courts of justice. It was, thus, opposed to the King's interests. It had declared the pursuit of wealth as sin; and threatened that rich men would be stopped at the gates of Heaven. It had banned interest on loans. It hindered trade by its tolls and various types of restrictions and prohibitions. The King and the merchant class, willingly or unwillingly, joined hands in overthrowing the authority of the Church under the disguise of Reformation. In this connection, Leo Huberman observes, "Before the rising middle class could wipe out feudalism, in each separate country, it had first to attack the central organisation of the Church. It did so. That struggle took on a religious disguise. It was called the Protestant Reformation. It was in essence the first decisive battle of the rising middle class against feudalism."

The forces of commercial expansion led further to the economic rivalries between different countries and to the emergence of the sentiment of nationalism. Nationalism called for a strong national government, for the control and direction of the nation's entire economy. Feudalism was no longer suited to the changed conditions. It was essentially a non-national system and had to go in the age of nationalism.

Sec. IV Features of Capitalism

The new system of economic organisation that was brought about by the Commercial, Agricultural and Industrial Revolutions is known as capitalism. Its main features are briefly stated below.

In feudalism, the most important part of economy was agriculture and land could be taken as the symbol of the age. In modern capitalism, the emphasis has shifted to manufacturing industry and capital is the

hall-mark of the age. Industry itself is characterised by the large-scale use of machinery, the large-scale system of production, the increased total volume of production, the factory system, the extreme division of process of production between different producers, the inter-regional and international division of labour, etc. A detailed reference to these has already been made in chapter VIII.

Agriculture too has been radically transformed. The old methods of cultivation are replaced by more advanced scientific methods. Cultivation has been largely mechanised and the ever-increasing knowledge of soil-chemistry, plant-biology manuring and irrigating is pressed in the service of agriculture. Production now is on a large-scale and the markets for which it is meant are mostly international. Agriculture now has become as much a business as industry or commerce.

The revolution in transport, which is a distinctive feature of capitalist development has been no less striking. Distances as obstacles to movement of goods and men have been overcome; and markets have been extended beyond national limits. The revolutionary development of transport has been the greatest single factor in making the world 'one world'.

On the social side, changes have been equally significant. The total population of every country has increased immensely with the development of new economy. This has mainly been possible because of the increase in the production of essentials of life which agricultural, industrial and transport revolutions have enabled. As has been already noted, the revolution in transport has given a new mobility to people; and social life, therefore has been intensified. The old segregation of small groups of population is gone and the nations' populations have been wedded into closely intergrated societies. In fact, the world population as a whole is being formed into one society.

Another important feature has been the concentration of population in towns, with many evils like crowding, bad housing, insanitary conditions, hurry in life, but with some advantages like better facilities for material comfort and intellectual and cultural development. Schools, colleges, libraries, cinemas, newspapers, political and social meetings, demonstrations in art etc. have enriched the city's intellectual and cultural life. Yet, the greatest single social feature of modern economic development has been the rise of an ever-increasing class of propertyless workers—the proletariat. Due to concentration of wealth in the hand of a few, which is inherent in capitalist system of production, the society is being divided into two major classes the capitalists owning the means of production and the labourers having nothing but labour to sell. What is more, the proletariat is becoming conscious of the antagonism between its interests and those of the capitalists—i.e. of class conflict.

The economic changes have in their turn evoked changes on the political side. The Church unlike in feudalism has no role to play in the capitalist system. Its political power waned rapidly with the rise of nationalism and its economic power with the reformation and consequent confiscation of its lands by the new powerful kings. On the other hand, the control of the national state on its economy increased progressively. In some countries like Japan, and Germany, the State actively participated in the building of new industry. In others like England, U. S. A. and India, it tried to remain aloof from the actual building of industry, at least in the beginning of the new era; yet, it had to assume progressively greater control especially in respect of foreign trade, transport development, employment of factory workers, depopulation of villages etc. In respect of foreign trade, the State had to help by way of protective tariff, subsidies, currency and credit management, transport facilities and so on. The State

also conquered new territories and peoples for the development of the nation's commerce and industry. Transport being the life-blood of the new economy, the State stepped in to control its management, the rates being charged, the adequacy and efficiency maintained from the point of country's defence, the competition between various forms of transport etc. In respect of factory workers, the State has stepped in to control the employment of children and women, the hours of works, the conditions of working places, the wages, the rights of workers to strike and to undertake political activity etc. Agriculture has been helped by increased facilities of credit, marketing, co-operation, preservation of small holdings by law, scientific research, and education, development of cottage industries etc. Further, the big industry itself has been helped by suitable legislation, subsidies, facilities for technical training of workers, scientific research etc.

The increased productivity of the economy and the development of transport have in their turn contributed to the power of the national State. Nationalism itself has been fed by economic forces. Peoples of different countries soon saw that their interests were competitive in respect of world trade and conquest of foreign territories and peoples. National rivalries, therefore, were accentuated with the development of the capacity to trade i.e. development of the productive power of national industries. International relations have been marked by incessant competition for empires and frequent flare-up in imperialistic wars.

It may also be incidentally mentioned that it is the development of communications and transport that has made possible the working of democracy in certain countries. Without this, the democratic functioning of government of a vast country as a whole would be impossible.

Sec. V. Principles of Capitalism

The underlying principles of capitalism may now be briefly noted. The system of private property the means of production i.e. land, machinery etc., is of fundamental importance. Without this, it could not be possible for a capitalist employer to employ a labourer for a wage and to pocket the profit by selling the product of labour for more than what it costs. The second principle is the economic freedom allowed to private individual to engage in any economic activity that is possible for them and which they think is in their best interests. Of course, the freedom is limited to some extent by the legislation and active control of the State. Yet this has not been on a scale big enough to nullify or seriously detract from the economic freedom. Thirdly, the economic freedom given to individuals has necessarily led to competition and ultimately to private monopoly in some cases. Yet the competitive basis of the economy is characteristic of the early capitalist economy. Fourthly, it may be noted that productive activity is undertaken by the individual in his own economic interest, the test being maximization of individual profit. On the one hand, individual production, being based on minute division of labour is no doubt technologically, social in character. It is also social in its end, as it is meant for the consumption of the society rather than for that of the producer himself. On the other hand the guiding principle of that productive activity is not social good but the producer's personal profit. Marx has noted this as the fundamental contradiction of the capitalist system. Fifthly, the system of production for individual profit, and the use of large-scale machinery have led to expropriation of the workers in respect of the tools and means of production. Labour and capital are the two essential factors of production. In non-capitalistic organisations of economy these two are owned by the same person. In capitalist system, however, the owners

of labour-power i.e. the workers cease to own the means of production. They become too big and costly to be owned individually by the workers. Only those who have accumulated capital come to own them. These are the capitalists. Thus, in the process of production, capital i.e. means of production comes to be supplied by capitalists and the labour by workers. And as the same total product of the joint enterprise is to be divided among two partners, labourers and capitalists, their interests become mutually antagonistic. The capitalists can increase their share of the final product, which they claim on the basis of their ownership of capital, only by reducing that of the labourers and vice versa. There is thus an inevitable class conflict—conflict between the capitalists class and the working class.

Sec. VI Contrast With Feudalism

(1) Land which is of supreme importance under feudalism fades in its significance under capitalism. Instead commerce and industry come to the forefront.

(2) In the stage of capitalism, economy is generally much more productive than in the feudal stage. Greater division of labour enabled by transport development, use of machinery, greater populations, vaster areas under habitation, advance of scientific knowledge and technical progress are some of the factors that account for the increased productivity.

(3) Feudal economy was characterised by restrictions in all aspects like agriculture, rural and urban industry, internal and external trade, freedom of enterprise etc. On the other hand, capitalist system thrives, best under conditions of individual freedom in matters of the choice of enterprise, methods of production, quality and quantity of goods, their prices and selling arrangements etc. Of course, even under capitalism, the individual freedom could never be com-

plete. It was limited by circumstances and also, by social customs and state laws. Yet the restrictions were not organic parts of capitalist system. Instead they were unwelcome to the system and it might have thrived better from merely economic point of view without them.

(4) Money assumed special importance, in as much as it alone enabled the ever-expanding division of labour and consequent exchange of goods and services in markets.

(5) As has been already noted, the separation of capital and labour as regards ownership is the essence of capitalism. Under feudalism, this was absent in industry but present in agriculture.

Sec. VII. The Overthrow of Capitalism

Just as forces of economic development led to the break-down of feudalism and replaced it by capitalism, they bid fair to replace the capitalist system by some form of socialism. Economic historians like Karl Marx have pointed out that the capitalist system has no finality about it. It is as much a passing phase of economic development as any other previous system. The forces that are regarded as being at work in changing the capitalist system may be noted very briefly.

(1) The competition among producers and the purpose of productive activity which seeks maximisation of private profit lead to relentless progress in the technique of production, which usually takes the form of increasing the scale of production per enterprise. In course of time, therefore, smaller producers who are not able to adopt the most upto date methods of production lose ground in the competitive market and are squeezed out by the bigger producers. The number of competitors is thus reduced and when in the whole field they remain only a few, they manage

to form combinations and gain monopoly power over the market. Relentless competitions and expansion in the scale of production thus substitute partial or complete monopoly in place of competition.

At this stage, capitalism is called monopoly capitalism as its characteristic feature is not competition but monopoly. And in course of time, the monopoly ceases to be only industrial in character. As competition within an industry breaks down and gives place to monopoly, similar transformation comes about as between different industries. The progressive tendency of larger and larger scale of business and the advantages of monopoly bring about combinations between different industries through the agency of financial institutions. The controllers of finance, thus become the controllers of industries; and their power is far greater than mere industrial monopolists, because they now come to control many industries together. This phase of capitalism is called finance-capitalism. It is evidently a higher stage in the evolution of capitalism. Thus the trend of the evolution of the capitalist system is the increasing power of monopoly in business and the consequent greater concentration of capital in a few hands.

(2) As a necessary result of the greater concentration of capital, the army of wage-earners goes on increasing and the class-conflict develops in intensity. It is increasingly reflected in more frequent and widespread strikes and lock-outs that virtually paralyse the working of the whole economy.

(3) The tussle between the labour class on the one hand and the capitalist class on the other intensifies progressively, and the State is required to take its stand on either side. It cannot remain neutral, because at a high stage, the tussle between labourers and capitalists threatens to endanger the very stability of the social life. The state, therefore, is unavoidably

required to join in the conflict, and it is supposed to join on the side of the capitalists. This is so, because in the first place the capitalists themselves manage to come to power even in a apparent political democracy on the strength of their wealth and the facilities it gives. Secondly, the state authorities, even if not capitalists themselves, cannot afford to go against the capitalists, because the capitalists, as owners of the machinery of production, can make the working of the governmental machinery impossible. Thirdly, the Capitalists being already the possessors of wealth, the onus of starting the fight which disturbs the peace of the society, falls on the workers. In the eyes of the state authority, therefore, the workers, as disturbers of peace become the offenders. The state authority, therefore, join hands with the capitalists and they together try to put down labour. At this stage, the capitalist system may throw over the system of political democracy, as such a system gives advantages to the working class which is numerically in majority. The state authority and the capitalist, therefore, suppress the democratic rights of the workers. If they succeed, a capitalist dictatorship—Fascism—is born. Fascism is evidently a higher stage in the evolution of capitalism itself.

(4) Fascism also is, however, a temporary phase. Under the influence of the capitalists, it tries to expand itself and conquer markets abroad for the benefit of the capitalists. The capitalist economy is inherently unstable. It can avoid or temper down the cyclical fluctuations and hold its balance only by conquest abroad and preparation for war at home. Inevitably, therefore, a fascist power comes in conflict with other national powers and starts worldwide imperialist wars.

(5) On the other hand, the workers go on organising and building their united strength on the basis of the class-conflict. When the fascist power is destroyed

or weakened as a result of the wars, the workers march to power and overthrow the capitalist system. Capital then is taken away from private ownership and is socialised. In short, capitalism yields place to some sort of socialism.

(6) The same purpose is achieved and capitalism is replaced by evolutionary process, if capitalism in any country retains the democratic system of politics, even when it is under the stress and strain of the intensifying class-conflict between workers and capitalists. In such a case, the Fascist dictatorship may not emerge at all. The workers may simply walk to the seat of power on the strength of their numerical majority in the ballot box. On coming to power, they may replace the capitalist system by a socialist one, of course, by constitutional means.

Another important feature of the capitalist economy is the trade cycle or the periodic breakdown of the economy. The tempo of production and employment of the capitalist economy suffers periodic ups and down. During the down-ward trend, production falls, unemployment increases, prices and profits falls and internal and international trade shrinks. The depression goes on deepening; but after a period there is again a revival upwards. Prices begin moving up, businessmen make profits, production increases and along with employment, internal and international trade hums with mounting activity and there is increasing prosperity for all. But this happy stage too is short lived. Once again, after a period, depression begins with all its economic evils. These trade-cycles or periodic breakdowns are inherent in the capitalist system which depends on private enterprise for private profit, the price-mechanism of free markets and the increasing interdependence of all sectors of economic activity and of different regions of the world.

CHAPTER XV

THE ECONOMIC BEARING OF SOME SOCIAL INSTITUTIONS & RELIGIONS

Sec. I. The Tribe

In the primitive economy of hunting, the social organisation was required to serve the two primary functions of procreation and food-gathering. For this the tribe was the organisation that was evolved. It was a group of persons related by kinship and association. The descent of an individual could not be traced beyond his mother, because there was no definite system of marriage. The individuals in the tribe, therefore, were only loosely related in respect of descent. But a more closely binding common tie was found in their belief that all of them descended from some common ancestor. Very often different animals and natural elements were regarded as their ancestors.

The tribe organisation was held together by the kinship. Besides, it was fortified by the instinct of pack-life, and the customs of the tribe. The individual member was helpless in the face of the natural forces and circumstances. He did not, therefore, dare to flout the customs of the tribe, and court the displeasure of his kinsmen. The fear of the wrath of supernatural powers, in case the individual offended the priests of the tribe, was another stabilising force.

For the economic activity of hunting and fruit-gathering, the tribe was a single unit. A smaller organisation could not have survived. The tribe maintained peace among its members. It assured subsis-

tance to each by equality of distribution of the collected 'wealth'. The tribe had no property, because economic activity did not yield any surplus above subsistence. The capital at its disposal was simple tools made of flint bone, metals etc.

Procreation, in the very primitive stages, was by promiscuous pairing. But, gradually the harmful effects of the pairing of persons of 'the same flesh' were realised, and the tribes became exogamous. The women in one tribe were given away in another tribe. In this case, the male issues stayed in the same tribe and their descent could be traced through the father. The tribe thus became patrilineal. But very often, the women stayed in the tribe and males were given away. In this case, the descent in the tribe could be traced through the mother. That is, the tribe became matrilineal. In all cases, the natural family consisted of the father, the mother and the child, but it was not the social or economic unit. It is to be also noted, that even when the system of exogamy was established, it did not necessarily lead to permanent marriages between a husband and a wife. A woman in one tribe might have many husbands from another tribe and correspondingly, a man from one tribe might have relations with many women from another tribe. The children stayed with their mothers and were brought up in the tribe.

The tribe had no classes, except that the priests, who were supposed to have competence to deal with supernatural powers, were distinguished from the rest. But they did not constitute an economic class.

When this form of economic activity changed from hunting to cattle-keeping and primitive agriculture, the tribe, as an undivided social unit was no longer necessary. In fact, the new economic activity could be better carried on by smaller economic unit like the family. Moreover, the increasing importance of the

woman in economic activity the emergence of private property and the development of the system of marriage led to the break up of the tribe in smaller families. This process is described subsequently.

Sec. II The Big Family or Household Community

As stated above, the tribe as social and economic unit broke up in to smaller families. The keeping of cattle could be done more conveniently by a smaller unit than the tribe. The development of agriculture too contributed to this effect. Tilling in the primitive stage of agriculture was an enterprise entrusted to the woman. Other economic activities also, of weaving of textiles, and of preparing the food had to be done by the woman. She thus became a center of economic activity and became the nucleus for the family, as a part from the tribe of which it was still a constituent. Another reason for the break up of the tribe organisation and the rise of the family was the emergence of private property. With the development of the economic activity, there appeared some surplus above the customary standard of consumption and this was appropriated as private property of the individuals. For the purposes of the inheritance of this property, the family organisation became necessary. Moreover, the system of permanent marriages and household provided the basis of the family.

It is not to be supposed, however, that the new emergent family consisted only of the husband, the wife and the children. Such a small family was not suited to the economic conditions of those times. When the family had to be economically almost self-sufficient producing all the necessary consumption goods. The family consisted of a large house-community, formed of all closely related members. In some tribes, the woman became dominant in the family. She controlled the entire household, with possibly the help of her brother, The husband had an inferior position in the

family of his wife. Such a family was the matriarchate family. In other cases, however, the family came to be dominated by the father—the eldest male member. This was the patriarchate family. In all cases, the entire property of the family was vested in the eldest male or female controlling member. He or she was the boss of the family; and in the little kingdom of the family, the authority of the boss was unquestioned. The land, tools, implements, houses, cattle, were all owned by the head of the family. Even the children, wife or husband and slaves, were owned like the rest of the property. The head of the family was unaccountable and no one could demand a partition of the family property. Such house-hold communities or big families flourished in the Roman, Greek and Feudal times.

The family organisation was suited for the economic activity of the times. The activity consisted mainly of agriculture. In absence of markets where all kinds of goods be bought and sold for money, each family was required to be economically self-sufficient. The big family was the smallest unit necessary for this purpose. It was also suited for keeping together the property of the family together and thus to stabilise the economic life.

The big families decayed when the economic conditions changed. When crafts were specialised, commerce was increasing, and old agricultural organisation was disrupting, the big house-community or family fell apart into still smaller families of the modern times. Another sociological cause of the break up was that powerful families, when giving their daughters in marriage to other families, insisted that their issues also be regarded as heirs. This led to the break up of the families.

Sec. III. The Hindu Joint Family

The Hindu joint family was similar to the big families of the foreign countries. It flourished in the

old economic conditions in India, which were similar to old conditions in other countries. The family had a sound basis in agriculture which was the principal economic activity since there was no alternative employment, all the members of the family had to live by the same land of the family and there was no point in falling apart. Further, the caste-system assigned particular crafts to particular castes, and the crafts were hereditary occupations. The members of a family had all to pursue the same craft. This unity of the craft was a binding force for all the members. Besides, in absence of facilities of travel, all the members of the family stayed in the same village and for the sake of convenience, had a strong tendency to stay together.

Besides being unavoidable and necessary for the economic activity of the times, the joint family had certain other economic advantages too. Work could be efficiently divided among its members in the family agriculture or occupation. It was, thus, an efficient production unit. It was also a consumption unit. The resources of the family were pooled together and utilised for the benefit of all members according to their need. Consumption was thus organised on communistic principles. Children, orphans, dependents, widows and old persons were well taken care of, in the joint family. It was thus a complete social unit. The joint family, also, avoided much duplication of labour and establishment which smaller families might have entailed.

The joint family is breaking down in modern times, primarily because of the changes in economic circumstances. The old binding factors are no more operative. Communication and travel facilities have been developing and the migration of some of the members to other places, in search of employment, automatically breaks down the joint family. With the emergence of

varied occupations provided by the developing commerce and the new industry, the members are not required to cling to the hereditary agriculture or occupation of the family. The new economy of free choice of occupations has emphasised the inequality in the abilities of the individual members of the family and has fanned the spirit of self-interest in them. The more capable of the members, therefore, hasten to break away from the joint family. The rise in the position of women too has been a disrupting force. The new economic circumstances have impaired the discipline and the hold of the head of the family. Internal quarrels, especially among the female members coming into the family from outside, have helped to break the family.

Sec. IV. The Modern Small Family

Due to the forces described above, the modern small family has come to be formed mainly of the father, the mother and the children in their minor ages. It is especially well suited to the modern town life and to the constant flux and change in the economic conditions.

But, forces are already apparent which threaten to break down even this small family. The family or any economic organisation for that matter, can survive if it is useful in the existing economic conditions as (a) a production unit, (b) as a consumption unit, (c) as a system of procreation and the rearing of children and (d) as an agency of the inheritance of the property. On all these four planks, the modern family seems to be giving way. (a) When the father alone was the earning member and the woman was required to look to the household affairs, the father was the rallying point for the family. He took part in the social scheme of the productive activity, as a representative of the family. The family thus was the smallest production unit. But with changing circumstances, the woman

too can take part in the productive organisation and be an earning member herself. When father and mother both became earning members, the family ceases to be the smallest production unit. Neither the man nor the woman is now the rallying point for the family. The family is not economically essential for either of them. (b) The family is also no longer the smallest consumption unit. With the availability of prepared food in the market and with the growth of lodging and boarding arrangements at a market price, the family is not necessary even as a consumption unit. (c) The family is not even necessary as a system of procreation. The institution of marriage binding the husband and wife permanently in regard to their sexual relations, is itself in the melting pot. Children are no longer physically unavoidable. In fact, they are not considered even desirable as they entail an economic liability. Besides the family is not even necessary for the care and education of the children. The work is being progressively taken up by the State, and other social agencies. (d) The significance of property and inheritance too is likely to decline in course of time. Being continually split up, the family property is relatively smaller than before. The Death duties are undermining the importance of inheritance. Besides, the importance of property as saving and as resort in times of economic distress and old age is declining with the progressive development of social insurance services for protection against unemployment, sickness, accident, old age, orphanage, widowhood etc.

Sec. V. The Caste-System

The caste is an endogamous group, distinguished from the rest of the similar groups in the Hindu society in respect of economic functions, social status and practices and religious ceremonies and deities. Its endogamous character preserved its distinctive-

ness through all times. The caste-system assigns particular crafts to particular castes rigidly; and the individual born in a caste has but to carry on the hereditary craft of his caste. He has no choice in the economic functions. Socially, the individual is born in a caste; he cannot change it of his own accord. The caste-system has a definite gradation of social status and the individual's social status too is determined by that of his caste. The caste prescribes social functions, practices and prohibitions; and the caste council—Panchayat is competent to pass judgment over the individual's social behaviour. The caste, also, prescribes distinctive religious practices and tutelary deities, for its members. And above all the social and economic prescriptions of the caste have a religious sanction behind them.

The objects of the caste-system might have been the stabilization of the economic and social life. By assigning economic functions to individuals by birth, it assured them a definite place in the economic system. At the same time, by prohibiting the individual to change his caste and craft, it provided perpetually for a complete self-sufficient economic system for every locality. Socially it sought to maintain the purity of descent. In matters of religion, it sought to keep up the purity of beliefs, and ceremonial practices. Above all by giving a religious sanction to all its social and economic prescriptions, it added a cohesive force to the caste-system.

The origin of the caste-system was the emergence of the social and economic classes. Of all other societies, in the course of economic development, the Hindu society too developed a priest class, supposedly competent to deal with the supernatural powers, and the warrior class; proficient in the art of the defence of the society. The rest of the class was that of the merchants, artisans and agriculturist. When the Aryan

Hindus conquered the aboriginal tribes in India, they were included in the fold of the society, as the menial class. At first, the classes were open to individuals, according to their economic and social function; but in course of time, the birth in a class determined the function of the individual, instead of vice-versa. With rigid compartmentation, the classes sub-divided into castes; and the castes multiplied according to the specialisation in crafts and economic functions. The isolation of localities and difference in language and ways of life brought in regional differences in the caste-system. The rigidity of the caste-system went on increasing in course of time as a reaction to foreign influences and rule over the Hindu society. In modern times, the castes and sub-castes totalled about 2,000.

The caste-system was well suited to the old economic conditions. It then conferred the following economic benefits. (a) It provided for a definite division of labour in the society. (b) It provided perpetually for a complete and self-sufficient economic system to each locality. (c) It assured the individual position in the economic activity. (d) The hereditary occupations made for hereditary technical skill and provided a natural and easy system of training the young in congenial surroundings of the home. (e) It checked the gain-spirit of the Brahmins and the Kshatriya warrior class; and turned their energies to the social good.

In modern times, the caste-system has become out of date. It is not suited to the requirements of the new economy. The modern economy is founded on the gain-spirit of the individual, the capitalist system of commerce and production, the large-scale system of production, the technological mobility of labour and capital, and the State's economic policy. The caste-system is unsuited to each one of these. It checked

the gain-spirit of many of the castes. It prevented the rise of the domestic system of production by prohibiting merchant financiers to dabble into the crafts. It opposed the factory system of production and the technological mobility of labour and capital, by assigning both particular economic functions to particular castes. It prevented a State's economic policy by investing the caste-councils with powers of control over the castes. Unlike the craft guilds in Europe, the caste-council did not derive their authority from the political government of the country. They derived it from religious scriptures.

Being unsuited to the new economy of the modern times, the caste-system revealed certain economic defects. It stunted the full growth of the individual according to his aptitudes and abilities. It thus led to a wastage of talent and ability. Its old hereditary skill was no longer useful for the modern industry. Above all, in the modern age of science, universal knowledge, individualism, and political democracy, it easily bred social and political discontent and led to disintegration of the society.

Under the stress of modern forces, the caste-system is already breaking down. The easy facilities of travel, unavoidable and increasing social intercourse of all castes, the decay of the hereditary occupations, the Western education and cultural influence stressing the equality of the human beings, the slackening of the hold of religion on the peoples' mind, the deliberate policy of the foreign rulers to give preferential treatment to lower castes and the attempts of enlightened social, religious and political leaders to abolish the caste-system, with a view to stop social disintegration are some of the forces breaking down the caste-system.

Sec. VI. Laws of Inheritance

In the early stages of economic development there was no property, as the productivity of the tribe hard-

ly produced more than what was required for subsistence. The tribe as a whole owned land, houses, tools, weapons, cattle etc. Property developed only when productivity of the society increased, and allowed a margin over bare subsistence. In the meanwhile as already stated before, the tribe split up into household communities or big families and the property came to be appropriated by these families. The property then, including the land, cattle, slaves, tools, houses etc. was vested in the head of the family and was inherited from him by the eldest male successor in patriarchal families. In the feudal times, the ownership of land was vested in the manorial lord. The other peasants owned their few personal belongings. The laws of inheritance at this stage of feudalism were different in different countries. In England, the law of primogeniture held sway for the lord as well as for the peasants. According to this the property of the father was inherited by the eldest son alone. In France, on the other hand, land was equally divided between all the heirs. In Germany the property was vested in a principle heir, but he was required to support all other heirs. In Russia, the landed property was divided among heirs and what is more important about the Russian system is that the heirs to the land did not receive their share from their parents but from the village community. Periodically land was redistributed among all intending cultivators of the village. In India the property was inherited by the eldest male heir. Under industrialism, the big families broke down into smaller families once the property came to be vested in the head of the smaller families. Accordingly, laws were passed in all countries to divide the family property among all heirs.

In India at present there are two systems of laws of inheritance, for the Hindus, the Dayabhaga system prevailing in Bengal and the Mitakshara system prevailing in other parts of India. In both the systems, the property of the family is liable to be equally

divided among the male heirs. In the Dayabhaga system, the sons can claim property only after the death of the father; while in the Mitakshar system, the sons can claim share in the family property even when the father is alive.

It will be seen that there are really two systems of inheritance, the premogeniture and the equal division among heirs. The economic effects of premogeniture are that the family property is kept intact from generation to generation. It is not continually divided and hence favours large-scale utilisation. In England, the system of premogeniture has been very favourable for large-scale farming. The system, also, prevents the division of the society into two classes—one of people born in family with property and other of people born without family property. Premogeniture confers property only in the eldest son. The rest of his brothers simply become commoners without property. But the system prevents division of property and perpetuates the inequality of distribution of property. It also gives rise to an aristocracy which can live by its property. This has a sinister influence on politics, as politics slips into the hands of people who have enough leisure to dabble into it.

The merits of the equal division of property at succession are that the system checks inequalities of wealth and broadens the basis of property. It gives to every heir something to start with in life. On agriculture it leads to a greater spreading out of the ownership and possession of land and leads to the system of peasant proprietorship. It settles the village population in land and makes for stable rural society. But in the present Indian conditions, it has allowed the evil of excessive sub-division and fragmentation of land.

Sec. VII. Economic Influence of Religions

The influence of religions on economic activity can be studied from these points of view. In the first place,

all religions have sought to clarify the nature of truth about the physical world that man inhabits. And surprisingly enough, most of the religions came to the conclusion that the appearances in this world are illusive. They are a play of "May". The ultimate truth is beyond this world, and man, concentrating his attention on the ultimate truth, should have an attitude of resignation towards the worldly things. The doctrines of asceticism and other worldliness are a corollary of such a philosophical thesis. In this context, the pursuit of economic good becomes a discredited objective.

Secondly, religions have formed peculiar mental attitudes of the masses of their followers who could not act up to the supreme philosophical thesis of asceticism. The sacredness of the word of scriptures dominated the men's mind. The scriptures limited the range of man's intellect and mind to the knowledge contained in them. This gave rise to an attitude of conservatism and traditionalism. The scriptures also propounded certain beliefs about the supernatural powers, created an awe about them, and enjoined upon the followers to propitiate them in certain prescribed ways. This led to superstition. The doctrine that the destiny of man was governed by supernatural powers, which are liable to act in erratic ways, created an attitude of fatalism. Moreover, the unquestioning belief in the reliability of scriptures and the dogmas that no aspect of truth can be outside the scriptures led to an attitude of opposition to scientific progress and rationalism.

These mental attitudes are extremely important from the point of economic history, because it is they which are responsible for the inertia of economic affairs and the slow pace of economic progress. If man had been thoroughly rational, unshackled by the binding forces of religion, economic progress might perhaps have been achieved at the same pace, at which it is

going on in the modern times. Probably the pace might have been quicker too, because even the modern age is not altogether free from the restraining forces of religion. To say this, is not however, to deny the services of religions in holding together the social organisations through times.

Thirdly, the religions are important from the point of economic history for the sanction which they gave to social and economic institutions and the prohibitions they imposed against certain practices. For example, Christianity gave its sanction to Feudalism in the Middle Age and Hinduism to the caste-system. All religions gave their sanctions to marriage institutions, private property and laws of inheritance. Among the prohibitions, may be mentioned the ban on interest on loans imposed by Christianity and Islam and that on economic pursuit by Hinduism in the case of Brahmins. Hinduism for some time, even prohibited them to travel abroad. These sanctions and prohibitions are important, because the sanctioned institutions, customs and ways of life die hard even when outmoded economically, and the prohibited ones are delayed in their rise and growth.

Jewism

There are two major contributions of Jewism to the economic history—its hostility to the influence of magic and supernatural powers, and the greater economic latitude which it allowed to its followers. The influence of magic and superstitions which the older religions had given prominence, was harmful to economic progress, as it strangled rationalism and scientific progress. Jewism was free from this and it also bequeathed this freedom to Christianity. The Jews of the early times, thus were nearer to the modern 'economic man' than followers of any other religion. Jewism, also, allowed a greater economic freedom to its followers. All other religions checked

the gain-seeking spirit. But Judaism allowed it in the relations between the Jews and the non-Jews. Christianity banned usury and the taking of interest on loans. Judaism allowed the Jews to accept interest from the Christians, to profit by financing trade, industry, Governmental administration and even wars. The Jews of the Middle Ages were doing what the modern bankers do.

Christianity

If the preachings of Christ had been followed faithfully, they might have changed the entire economic history of Europe and possibly might have established communism long ago. They were opposed to the individual's gain-seeking, to private property that could be used to exploit others, to economic inequality that divided the society into the rich and the poor, in fact to all that modern capitalism stands for. But Christ's original preaching were ignored and Christianity as the religion of all Europe developed on the lines of all other religions. It accepted an ideal of asceticism and other worldliness. It paid lip-service to what Christ preached. But in fact, it allowed itself to be entangled into the feudal economic organisation. In the middle Ages, the Church became the biggest landlord in Europe, exacted services from the serfs, tolls from traders and taxes from all people. As the biggest landlord, it had vested interests in Feudalism and became a tower of strength to it.

In the economic transition from Feudalism to Capitalism, Christianity underwent an appropriate change. Its ideal of asceticism, celibacy and poverty was against the spirit of economic progress. It pricked the conscience of the new rising class of merchants and industrialist. In the Reformation, therefore, the old idea was scrapped, and salvation was afforded to all common men living and striving for their economic good. Calvinism, further, addressed the Christian not

to flee away from the world but to work in it according to his calling. All this gave the modern businessman a clear conscience to amass wealth and to get thoroughly engrossed in economic activity.

From the point of economic history, Christianity, has been a progressive and accomodating religion. In times of feudalism, it accepted feudalism and lent its support to it. In times of commercial expansion, it took up the cause of the Christian merchants in the Crusades it declared over the Eastern Islam. While the system of slavery was prevailing, it allowed a clear conscience to the Christian merchants of Spain and England to engage in slave trade and the Christian planters of South American colonies to employ the slaves to the maximum economic advantage. In the middle Ages, it disallowed usury and interest on loans; but it rectified its attitude in time to allow the development of commerce and industry from the 15th century.

The Spread of Islam and Crusades

Islam made its greatest contribution to the economic development by its invasions from Spain to Manchuria. The Moslems spread all over Asia and the Southern part of Europe in their conquest of the world for their religion. In so doing, they brought all the different countries nearer to one another by establishing close contact between them. It gave opportunities of trade between the different countries. Peoples of different countries got an opportunity of exchanging their special goods, tastes, ways of life, knowledge in different sciences, culture etc. The Moslem invasions thus stimulated commercial development, throughout Asia and between the East and the West.

The crusades (or Holy wars between Christians and the Moslems) of the 11th to 14th centuries, which arose out of the encroachment of Islam on Christian territory are a typical and the most important case in point.

Apart from the religions and political causes, the economic causes of the crusades were that by sitting tight over the Eastern Mediterranean countries, the Moslem checked the commercial activities of the merchants of Venice and Genoa. The Western merchants, therefore, wanted to get trade concessions in the East through the crusades. The crusades were also economically profitable to all the Christian feudal lords and serfs. The feudal law of premogeniture rendered all but the eldest male heirs propertyless. These victims of premogeniture found an opportunity in crusades to gain economically by carving out better corners for them in new conquered lands.

The economic consequences of the crusades are still more important from the point of economic history. The big crusades armies had to draw vast quantities of grains, horses, armour etc. from Europe. The European merchants of Venice and Genoa found in this a great trading opportunity; and the Mediterranean Commerce grew to its highest stage between the 12th and the 15th centuries. Trade was also stimulated because the crusades freed Jerusalem from the Moslems for a time being and invited a big flow of pilgrims from the West: and trade flourished along the routes of the pilgrimage. Moreover, the wealthier of the pilgrims and the crusaders were introduced to many useful commodities and ways of life of the East. They took these to the Western Europe and a big trade developed between East and West in the Eastern commodities of a fine cotton cloth, rice, sugar, lemons, apricots, medicines, articles of finer arts and luxuries, weapon etc. The crusades also helped the introduction of money economy in Europe. The crusaders required coined money and the coinage stimulated banking development. The crusaders became accustomed to money economy and realising the power of money in purchasing various commodities on big markets welcomed the commutation of the serfs physical services

in terms of money. Through the crusaders, money and money economy percolated to all parts of Europe. This was a necessary prelude to the subsequent commercial and agricultural development.

Hinduism

The changing facets of Hindu philosophy and socio-religious institutions and customs create a difficulty in assessing the economic effects of Hinduism. Taking its modern phase, however, we can study these from two points of view; those of Hindu philosophy and the mental attitudes it creates and those of the social institutions and customs to which the religion gives its sanction.

The economic effects of the caste-system, joint family and the laws of inheritance, all sanctioned by Hinduism have already been noted. As regards the system of marriage, Hinduism gave its sanction to compulsory and early marriages and encouraged procreation. This system in modern times has led to overpopulation and poor health of population. The economic status of women in different castes is different. In some higher castes, socio-religious traditions and lack of education prevented women from securing any gainful employment. In lower castes, however, the woman's economic status compared fairly well with that of man. The women of the agricultural classes and the artisan classes utilised their labour power and leisure in gainful economic activities along with men.

Hinduism is being much criticised in recent times on account of its philosophical teachings. It is argued that the ideal of asceticism and other worldliness which it places before its followers has been responsible for their fatalism and lack of enthusiasm for economic progress. Hinduism is thus held responsible for the economic backwardness of the Hindus. There are three major counter-arguments that can refute this allegation

totally. In the first place, it must be noted that the followers of the same Hinduism were for a long period in the past economically very active. They were pioneers in trade and industries. They had established overseas empires. The Indian industrial goods were famous throughout the world; and India, the home of Hindus, was renowned as a land of fabulous wealth. The same Hindu philosophy cannot be held responsible for the economic backwardness of its followers. Secondly the Hindu philosophy has been periodically reinterpreted and reformulated according to the needs of the time. It has never been an unchangeable dogma. Even in recent times, it is being reinterpreted to show that it does not preach retreat from the economic activity. Thirdly, it must be noted that the ideal of ascetism and other worldliness is not a unique feature of Hinduism alone. All religions put before their followers more or less the same ideal. And if that has not checked the economic progress of the followers of other religions, the economic backwardness of the Hindus in modern times cannot be attributed to the preaching of the Hindu religion. The fact everywhere is that religious preaching has never been able to block the economic progress of the people. Economic circumstances determine it and religion adjusts itself to changing economic conditions. The history of the influence of Christianity over the economic activities of the Christians from the Middle Ages onwards is a convincing refutation of the allegation that religious preachings decisively make or mar the economic prosperity of the followers.



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